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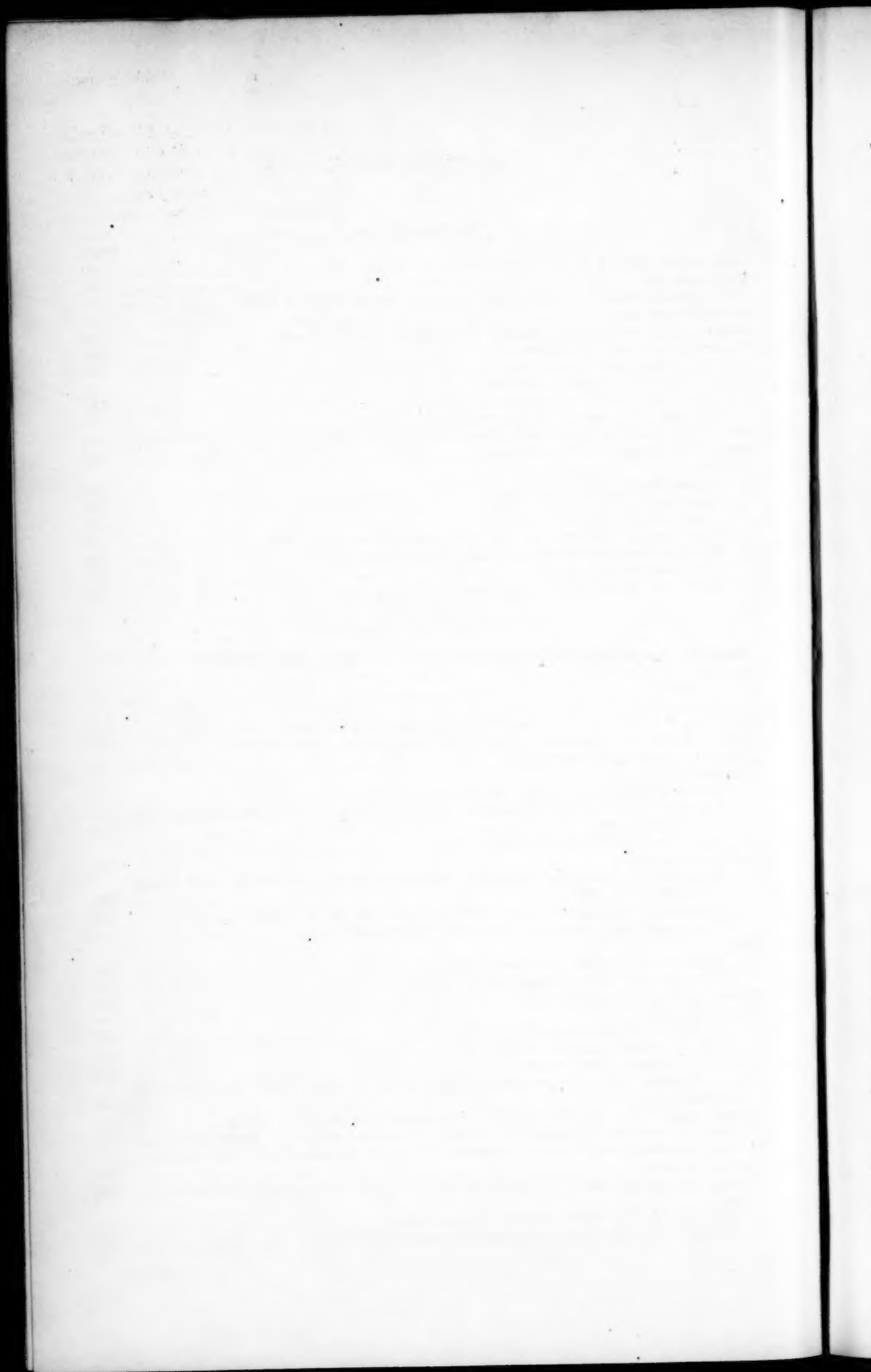
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PUBLIC HEALTH REPORTS.

UNITED STATES.

Governmental control of therapeutic serums, vaccine, etc.

[Prepared under direction of the Surgeon-General by P. A. Surg. H. D. Geddings, U. S. M. H. S., acting director of the hygienic laboratory.]

In view of recent unfortunate results attending the use of diphtheria antitoxin in one city and vaccine virus in another, there have been numerous suggestions looking to the control of these materials and analogous products by the National Government, and the propositions have received a certain amount of comment of a favorable nature.

It is unnecessary to point out that the subject is a very important one, and at the same time one presenting many difficulties, and while it is recognized that it would be at once impracticable and possibly undesirable that the Government should engage in the manufacture of these substances, it is felt that good might accrue from government supervision and periodical inspection of the laboratories and farms where serums and vaccine virus are produced commercially.

In view of these facts, the laws relating to the preparation, sale, and distribution of therapeutic serums in European countries are herewith presented. It will be noted that there is an absence of all laws and regulations on the subject from the United Kingdom, though diligent search has been made for them.

MEMORANDUM.

French law of April 26, 1895, relative to the preparation, sale, and distribution of therapeutic serums and other analogous products.

Article 1. Attenuated viruses, therapeutic serums, modified toxins, and analogous products, applicable to the prophylaxis and therapeutics of contagious diseases, and injectable substances of organic origin, of undefined chemical composition, applicable to the treatment of acute or chronic affections, shall not be marketed under an actual or trade name until they shall have been, in point of view of manufacture and origin, the recipient of a governmental authorization rendered according to the judgment of the consulting committee of the council of hygiene of France, and of the academy of medicine. These products will be granted a temporary or revocable license only, and shall be subjected to an inspection to be made by a commission appointed by a minister having competent authority.

Art. 2. These products shall be delivered to the public by pharmacists only upon physicians' prescriptions. Each bottle or container shall bear the label of the place and date of manufacture.

In case of necessity, physicians are authorized to furnish these remedies to their patients.

When intended for gratuitous issue to the poor, the vials containing

the products shall bear the inscription "Public assistance—gratuitous" blown into the glass.

The preparations may be kept, in addition to pharmacies, if under the supervision of a physician, in such establishments of public assistance as may be designed by the administration, which establishments shall have the right to procure the products directly.

These regulations do not apply to either animal or humanized vaccine virus.

Art. 3. The delivery or sale of the substances mentioned in article 1, under any name whatsoever, shall be subject to the provisions of article 423 of the penal code and the law of March 27, 1871.

Art. 4. All other violations of the provisions of this law shall be punished by a fine of from 16 to 1,000 francs.

French law of November 14, 1896.

The president of the Republic, in view, etc., decrees—

Article 1. The preparation of therapeutic serums and animal extracts is authorized in the below designated laboratories, under the following conditions: First, laboratory of the "Société chimique de usines du Rhone" (Quai de Retz, No. 8, Lyons); second, for the manufacture of antistreptococcus serum, the laboratory of Messrs. Chaix and Rémy (No. 10 Rue de l'Orme, Paris); third, manufacture of animal extracts prepared according to the method of Brown Séquard.

Art. 2. These products may be marketed under a specific or trade name. The license granted them is temporary and revocable, and they are subject to the inspection required by law.

Art. 3. The minister of the interior is charged, etc.

German law, No 2206.

We, William, by the grace of God, Emperor of Germany and King of Prussia, do order in the name of the Empire, on the ground of the requirement in paragraph 6, act 2, of the trade ordinance (Imperial Law Bulletin, 1883, par. 177) as follows:

To those drugs and chemical preparations which according to paragraph 2 of the ordinance in regard to the traffic in medicines of January 27, 1890 (Imperial Law Bulletin, par. 9), and to the accompanying Schedule B, articles only to be bought and sold in apothecary shops, is added, "serum antidiphtheriticum," etc.

The articles enumerated in the above schedule are arsenic, barium, copper, etc., and preparations containing free nitric, hydrochloric, and sulphuric acids.

Diphtheria antitoxin has also been introduced into the German pharmacopeia under the following title and conditions:

Serum antidiphtheriticum—Diphtheric heilserum. (Arzeneibuch fur das Deutsche Reich, 1900). Pharmacopeia Germanica (Ed. IV).

Blood serum from horses which are immune against diphtheria. Derived from accredited manufacturing places after it has been tested for its immunizing unit contents, absence of germs and amount of preserving agents (phenol or trikresol), and has been approved for sale by the Royal Prussian institute for experimental medicine, in Frankfurt-on-the-Main.

It occurs in a liquid and a solid form. In either form this serum must be dispensed in vials only, with the official hermetic seal, with the name and place of manufacture, stating the antitoxin contents of 1 cubic centimeter, the total contents of 1 vial, the control number, and the day of its official examination.

These vials are packed so as to exclude the light; the packages must also give the above information.

The seals bear on one side an eagle or a lion. The other side gives the total contents of immunizing units.

ITALY.

Law in regard to the production and sale of therapeutic serums, 1899.

Article 1. No one shall, without consent of the minister of the interior, prepare for sale (a) vaccine; (b) virus; (c) therapeutic serums, and (d) toxins, antitoxins, and other similar preparations. The conditions for this consent and the special instructions in regard to the preparation and sale, shall be determined by the Government after hearings from the council of health.

Art. 2. The above-named preparations shall undergo for the determination of their value, a competent test by a scientist attached to the health department, or some other laboratory, who shall be named by the minister of the interior upon recommendation of the imperial health council. It shall be decided on the recommendation of the health council, which preparations shall be tested, and from what point of view.

Art. 3. The sale of the preparations indicated in article 1, and products prepared abroad, shall take place in the limits of the Kingdom only by permission of the minister of the interior, with the consent of the superior council of health, under the conditions of the above ordinance.

Art. 4. Infraction of these requirements and of the order contained in article 1, shall be punished by a fine of from 100 to 500 lire. In case of repeated offense, imprisonment for as much as twenty days may be imposed in addition to the fine. The above named penalties are inflicted without detriment to the penalties previously imposed by government officials for the protection of the public health and provided for in the penal code.

RUSSIA.

The commission for the prevention of the introduction of the plague, has, at its sitting of May 3, left the preparation of antipest serum with bacteriological institutions which have given the necessary guarantees, on condition—

1. That no money shall be paid by the Crown to such establishments;
2. That no obstacles shall be placed by the local authorities in the way of the preparation of these serums;

3. That the serum shall be prepared harmlessly—that is to say, by means of dead microorganisms or toxins, and not by means of living cultures;

4. That the serum prepared shall, before being sent from the imperial institute of experimental medicine, be tested, and

5. That the commission reserves the right of disposal of the serums to the places and institutions which have the most need of it.

The withdrawal from the custom houses of serum from abroad, ordered by private persons, is permitted by the commission on condition that in each case a statement of the place of manufacture shall accompany the consignment, and that only serums from institutions, the names of which shall be furnished to the customs officers by the president of the commission, shall be admitted.

THE PREVENTION OF THE SPREAD OF SCARLET FEVER.

[Prepared under the direction of the surgeon-general by P. A. Surg. H. D. Geddings, Acting Director Hygienic Laboratory.]

In view of the receipt by the Bureau of inquiries from various sources as to measures looking to the prevention of the spread of scarlet fever, and methods of disinfection to be followed upon the termination of cases of the disease, there is reproduced here a publication which appeared in the PUBLIC HEALTH REPORTS of December 13, 1901, by P. A. Surg. H. D. Geddings, U. S. Marine-Hospital Service, upon methods of disinfection to be pursued against scarlet fever, to which is appended a circular letter by Acting Asst. Surg. J. Y. Porter, State health officer of Florida, to local health officers and the medical profession in his State—the one article naturally supplementing the other.

Disinfection against scarlet fever.

[By H. D. GEDDINGS, Passed Assistant Surgeon, U. S. M. H. S.]

In the consideration of this subject, as in all other subjects connected with disinfection, the two general factors must be considered of the nature of the infection and the best means for destroying it.

As is well known, infection or communicability may be of two general varieties—the immediate, in which the disease is communicated by actual contact, and the mediate, in which the infection is communicated to articles or things and thence transmitted to others.

The infection of scarlet fever is of both natures. Immediate infection certainly can occur by the contact of a susceptible person with one suffering with the disease, but still more probable is it that the infection is highly mediate in its character and is communicated to the surroundings of the patient, furniture of rooms, bedding, clothing, etc., largely through the fine, scaly particles, which are given off by the patient and diffused with the dust of the room. This desquamation constitutes the essentially dangerous feature of scarlet fever from the point of view of the health officer, for even after his desquamatory process has been apparently completed it may be renewed and the patient again become capable of conveying infection. The poison clings with great persistency to clothing of all kinds and the furniture of a room, specially that which is upholstered. It is exceedingly tenacious in its character, and clothing which has been put away for months, or even for years, may, unless thoroughly disinfected, again convey contagion.

Observations which have been made from time to time show that the disease has been often transmitted through the medium of the milk supply, and recent experience in Detroit, Mich., has shown that even when the milk supply was not at fault the disease has been communicated through the medium of milk tickets which were repeatedly used.

The specific germ of the disease is not known. Therefore, disinfect-

tion of rooms or apartments where the disease has prevailed must be conducted on general principles. These disinfecting processes differ in no wise from those employed for the other acute infectious or communicable diseases. The poison, while very enduring, is probably of a not very resistant nature, which is fortunate in view of the high contagiousness of the disease and its serious nature when prevalent in epidemic form.

It is desired to dwell with particular emphasis upon the danger which accompanies the desquamatory stage of the disease, which makes it different from the other acute infectious diseases. The effort must be not only to destroy the contagion conveyed in these particles, but to prevent the scattering of the said particles into the apartment where they become mingled with the dust always present in the atmosphere. Therefore, each case of scarlet fever must be a study in itself. No hard and fast rule can be laid down as to the period of time after the appearance of the disease when disinfection should be practiced. So long as the desquamation of the patient continues so long is he or she liable to reinfect a room or apartment which has already been disinfected, no matter how thorough that disinfection has been. Observation alone can determine this point, and until the desquamation has ceased or means have been taken to minimize its danger, it is useless to undertake the disinfection of the sick room.

Much may be accomplished in the matter of prevention of spread of the disease by the thorough bathing of the patient with antiseptic baths, followed by inunction with any of the animal or vegetable oils, or with a vaseline which has been rendered mildly antiseptic, with carbolic acid, boracic acid, etc.

Methods of disinfection.

As before remarked, all methods are applicable, and if faithfully and intelligently applied all are probably efficacious. Obviously there must be a difference in the methods, depending upon the nature of the articles or materials to be disinfected. For the mattress of the sick room a surface disinfection may be accomplished, either by formaldehyd gas, by sulphur dioxide, or, if the infection is supposed to be deep seated, which it possibly may be, steam or immersion in hot water may be required.

Steam should only be applied in apparatus specially designed to obtain efficient action, and if immersion in hot water is the method determined upon, care must be exercised that the article to be disinfected is totally submerged, that the water is at the actual boiling point, and that the boiling continue for twenty minutes or half an hour.

Particular attention should be taken to effectually sterilize the dust of the living room, and the walls, ceiling, and floor of the apartment. Carpets, if any, should be removed and treated either by steam, by immersion in hot water, or by thorough exposure to one of the gaseous disinfectants to be considered hereafter. The walls, ceiling, and floor had better be thoroughly wiped down with a solution of bichloride of mercury, 1-1000 in strength, or carbolic acid of a strength of 5 per cent. This cleaning must be thorough, as any dereliction will almost certainly meet its punishment in a renewal of the infection.

Disinfection with sulphur dioxide would be perfectly efficient against scarlet fever, but is open to the objection that, when applied in the proper germicidal strength for a sufficient length of time, it will injure or ruin any clothing, hangings, upholstery, and furniture which may be

subjected to its action. Undoubtedly it will sometimes become necessary to use this agent, in which case, with the limitation as to usefulness mentioned above, $3\frac{1}{2}$ to 4 pounds of powdered sulphur should be burned in the tightly closed room to every 1,000 feet of space, all cracks, windows, and doors being tightly sealed, and the room should be kept closed from twelve to twenty-four hours. Due care should be taken that the vessels in which the sulphur is burned should be immersed in other vessels containing water, which, by its vaporization, renders the sulphur dioxide germicidally active, and without which moisture the process is useless.

Probably formaldehyd is the best germicide for the disinfection of the sick room or for the bedding and fabrics therein contained, with the possible exception of mattresses. Four methods of using the formaldehyd gas may be mentioned, namely:

First. The sheet method;

Second. The Kuhn lamp;

Third. By evolving formaldehyd from its watery solution by apparatus without pressure, and

Fourth. By the autoclave.

First. The sheet method may be briefly described as spraying suspended sheets with 5 ounces of the 40 per cent solution of formaldehyd gas (formalin) for each 1,000 cubic feet of space; the time of exposure to be not less than five hours. The quantity should be divided between several sheets, and the liquid should be sprayed upon these sheets so as to form small drops rather than to effect a general wetting of the surface.

Second. The Kuhn lamp depends for effectiveness upon the production of formaldehyd by oxidation of wood alcohol by passing it over a platinized surface in a state of incandescence. The method requires the use of about 20 ounces of wood alcohol to about each 1,000 cubic feet of space, and the time of exposure should be not less than six hours, counting from the time when the alcohol is all volatilized. One objection that has been made is that it may require a large number of lamps or generators. This may be avoided by placing the generator immediately within the door of the apartment undergoing disinfection upon a board or other suitable contrivance. The apparatus may be withdrawn after the completion of the volatilization of the alcohol (about an hour and a half) by quickly opening the door and withdrawing it by means of a cord or rope previously attached to it. This can be quickly done without loss of gas, and the apparatus is then available for use in another apartment.

Third. The third method involves the employment of various forms of formaldehyd regenerating apparatus, of which the Trenner-Lee, the Lentz, and others too numerous to mention, may be accepted as types.

The process depends upon the principle of evolving without pressure formaldehyd gas from its watery solution, to which 1 per cent of glycerin has been added. The process is one, so to speak, of disinfection by distillation. The apparatus is in sight and the gas is injected into the room or apartment through the keyhole by means of a flexible tube. Twenty ounces of the formaldehyd solution, with the addition of 1 per cent of glycerin should be used for each 1,000 cubic feet of space, and the apartment kept closed for six hours.

Fourth. Disinfection by the autoclaves manufactured by the Kny-Scherer Company and the Kensington Engine Works, differs from the above process in that the formaldehyd gas is generated by heating formalin mixed with a neutral salt in a retort under a pressure of at least

45 pounds to the square inch. At least 10 ounces of fluid should be used for each 1,000 cubic feet of space, and the time of exposure may be varied from two to twenty-four hours; six hours in general practice would be amply sufficient, but care must be taken that to the formaldehyd solution is added 20 per cent of a neutral salt, such as borax or calcium chloride, and that the pressure in the apparatus is from 45 to 60 pounds per square inch. The gas is injected into the room through the keyhole by means of the nozzle and flexible rubber tube.

Any of the methods above given will prove thoroughly efficient in practice. Thoroughness of work is in this, as in all other disinfecting processes, an essential requirement; nothing must be neglected—nothing left to chance.

The infection of scarlet fever is very insidious, very long lived, and only fairly resistant. It must be thoroughly reached in order to be destroyed; but it is believed that the application of any one of the methods given above, or any combination of the methods, will result in thorough destruction of the infection if care is exercised in discriminating as to the time when the disinfecting process is employed. This should not be before the desquamation of the patient is complete, and even after the desquamatory process is apparently completed, care should be exercised as to frequent bathing of the patient, and the application of the oily or greasy substances made mention of above.

In this, as in all other processes connected with disinfection or protection against infectious and contagious diseases, almost as much will depend upon the judgment of the health officer or attending physician as upon the method.

Circular letter on scarlet fever.

[By JOSEPH Y. PORTER, State health officer of Florida.]

JACKSONVILLE, FLA., ———, 190—.

SIR: Scarlet fever is reported from your city, and some of your citizens express great apprehension that your physicians are not adopting sufficiently restrictive measures to prevent a general spread of the disease. It occurs, therefore, to the State board of health to indicate to you in a friendly manner, and without any intention to officiously intrude upon the prerogatives of your city health government, certain features of management which it is thought may aid your health authorities in their methods of eradication of scarlet fever from your community, and which, although very probably well known, may have been lost sight of or overlooked.

A few general principles apply to communicable diseases which, unrestrained, tend to become epidemic in character.

First. Cases should be isolated, not partially but completely, from well members of the family, and in order to do this effectively, a room for the treatment of the case or cases should be selected in the dwelling or home, well ventilated, and as far removed from the other occupants as is possible. To avoid a great deal of trouble after the termination of the case, and to lessen the danger of retained infection, the room should be as scantily furnished as will be conducive to comfort and hygienic care of the patient. Carpets, rugs, curtains, and superfluous articles of furniture should be removed, the floors, ceilings, and window

casings wiped off to remove dirt and dust, and ample receptacles provided for disinfecting solutions, before the sick one is moved in.

Second. Only those who intend to nurse the sick and remain with the ase should be allowed in the sick room. On no conditions should the nurses be permitted to have communication with the well members of the family or with the outside public without completely changing outer garments and disinfecting face, hands, hair, and beard. As this process is a troublesome thing to do several times a day, it is the better plan for nurses in contagious diseases to keep themselves isolated with their patients.

Third. During the progress of contagious sickness, articles used in the sick room should be disinfected before leaving the apartment. Tumblers, mugs, dishes, knives, and forks after being used by the sick should be dipped in a disinfecting solution or immersed in actually boiling water for fifteen minutes, and body linen, bedclothes, towels, handkerchiefs, and, in fact, every textile article used in or about a sick room or person, should be immersed for several hours in a strong germicidal solution before being removed from the room to be laundered. Disinfection of excreta of the sick—stools, urine, and discharges of every kind—should always be disinfected before being taken in covered vessels from the sick room. In some diseases, such as diphtheria and scarlet fever, where there is apt to be much mucous and membranous discharge from the mouth and nostrils, the use of paper napkins is preferable, for these can be burned in a fireplace or stove in the room. This is also a good method of disposal of such soiled textile articles which have no particular value.

Fourth. On the termination of a case of contagious sickness, by complete recovery of the patient or by death, the apartment should be disinfected before being again used. Mattresses, pillows, and such bedroom furnishings that can not be boiled should be burned after removal from the room in covered boxes or vessels with impervious coverings.

The foregoing are some of the precepts which should be followed when dealing with any of the infectious and contagious diseases, and are equally applicable to cases of diphtheria, scarlet fever, and measles, as to smallpox and yellow fever.

Scarlet fever—scarlatina—as you doubtless know, is a highly contagious malady, which may be contracted at any age by those not protected by a previous attack, but is principally a disease of the developing period of life—youth—from infancy to 20 or 30 years. It is a disease, even when skillfully treated, which often leaves in its trail impairment of hearing, diminished eyesight, chronic sore throat, or kidney affection. Therefore, no one, specially a child, should be exposed under the fallacious idea, which is criminal, that children should have this disease before advancing to manhood or womanhood.

Anyone who would intentionally or needlessly expose another to the poison of scarlet fever, or any of the more highly contagious epidemic diseases, should be prosecuted by the law.

When scarlet fever is reported or suspected in a community, every sore throat accompanied by fever, and subsequently a rash, should be looked upon with uneasiness, and should be isolated from the well until the judgment of a physician is invoked.

Moderately severe cases generally present premonitory symptoms of sore throat, high fever—from 103 to 105° F.—from twenty-four to thirty-six hours, and perhaps three days, when a bright red rash appears all over the body, accompanied with itching. The tongue has red papillæ (which are plainly seen), with red tip, and which gives it the appearance of a strawberry. A strawberry tongue, therefore, with the other symptoms mentioned, and with albuminous urine, is strongly indicative of scarlet fever. From ten days to two weeks, sometimes longer or shorter, according to individual cases, the rash fades and disappears, when the desquamation period begins. This is an effort of nature to cast off the dead epidermis—scarf skin—of the body. Scarlet fever is a necrobiotic disease, destructive to tissues principally glandular. It is at this stage of sickness that ear trouble is manifested, eye-sight impaired, or kidneys become acutely inflamed. And it is also at this stage that the contagious principle is most acute and readily communicable.

No adult or child sick from scarlet fever should be given liberty or allowed communication with the public generally, until the desquamation period is entirely and completely finished. Parents in their impatience and haste to be relieved from restrictive regulations, too often declare their child or children well who have lately been sick from scarlet fever, before they *are well*, and before this “scarf skin” shedding period is through with. Thus, in a few days or weeks, other cases are reported in the same neighborhood among children who have been visiting, or playing elsewhere, with the scarlet fever convalescents.

In addition to insisting upon and maintaining a proper isolation of the sick with their nurses, if the municipal or town authorities will require imperatively that a scarlet fever case shall not be released from restrictive regulations until the “shedding” stage is completely over, and will then see that the room, rooms, or entire premises, if deemed advisable, shall be *perfectly* disinfected, I think that you will have no difficulty in preventing scarlet fever from spreading beyond the initial cases.

Inauguration of national quarantine functions on the coast of Maine.

On December 5, 1901, at the request of the State board of health of Maine, a quarantine station was established at Eastport under the charge of Dr. E. M. Small, acting assistant surgeon, U. S. Marine-Hospital Service.

At the request of the State board of health of Maine, and under the provisions of the act of Congress, approved February 15, 1893, the U. S. Marine-Hospital Service assumed control of quarantine at Portland, Me., and on December 27, 1901, Surg. P. C. Kalloch, U. S. Marine-Hospital Service, was detailed by authority of the President as quarantine officer at that port, arriving there January 9, 1902.

A vaccination creed.

CHICAGO, ILL., December, 1901.

We, the undersigned, hereby publicly profess our firm belief, based upon positive knowledge, gained through years of personal experience and study of smallpox and vaccination—

First. That true vaccination, repeated until it no longer "takes," always prevents smallpox. Nothing else does.

Second. That true vaccination—that is, vaccination properly done on a clean arm with pure lymph and kept perfectly clean and unbroken afterwards—never did and never will make a serious sore.

Third. That such a vaccination leaves a characteristic scar, unlike that from any other cause, which is recognizable during life and is the only conclusive evidence of a successful vaccination.

Fourth. That no untoward results ever follow such vaccination. On the other hand, thousands of lives are annually sacrificed through its neglect, a neglect begotten of want of knowledge.

ARTHUR R. REYNOLDS, M. D.,
Commissioner of Health, City of Chicago.

HERMAN SPALDING, M. D.,
Chief Medical Inspector, Department of Health.

[Reports to the Surgeon-General United States Marine-Hospital Service.]

Report of the epidemic of measles in Alaska during the year 1900.

[By DUNLOP MOORE, Assistant Surgeon, U. S. M. H. S.]

See article entitled "Mortality record of Unalaska and adjacent country for 1900," in PUBLIC HEALTH REPORTS No. 40, October 4, 1901.

The most striking event in the recent medical history of Alaska was the very extensive mortality among the aboriginal population during the summer of the year 1900. Various more or less accurate references to this catastrophe have appeared in print during the past year, but, owing to the almost insuperable difficulties of acquiring correct information on this subject, the real cause of this immense death rate and the extent of territory ravaged does not appear to have been clearly defined. Thus, this mortality has been variously ascribed to la grippe, epidemic pneumonia, smallpox, measles, etc. One account refers to a mysterious plague of Asiatic origin which had ravaged the native settlements along the Yukon. Impressed with the historic interest attaching to this phenomenon, as illustrating the rôle of infectious diseases in bringing about the extinction of previously isolated aboriginal races, and perhaps as indicating the channels through which quarantinable diseases may be transmitted in the great district of Alaska, I have the honor to submit the following report:

The data at my disposal were collated from numerous sources, the most authentic available, while stationed at Dutch Harbor during the summer of 1900, and Nome during the succeeding year. Under the circumstances, absolute accuracy in all details can not be predicted; it is, however, believed that any errors which may have crept into this account will not affect the main conclusions indicated.

There seems now no reason to doubt that the unusual mortality occurring among the natives of western Alaska, northeastern Siberia, and the adjacent islands during the year 1900, was wholly due to measles or rather the ordinary pulmonary complications and sequelæ of that

disease. That such was the case in numerous localities in Alaska is proved by the testimony of trustworthy eyewitnesses, in a few instances, themselves physicians. Where such direct positive evidence fails us, a study of the geographical relations of the affected settlements, in connection with the chronological sequence of the various outbreaks of disease, leaves no reasonable doubt that they were due to a pandemic of a single infection.

Several cases of rubeola occurring in Alaska, during the summer of 1900, in which the disease was contracted in the States, have been reported to me. Investigation of these cases, however, indicates that they bore no relation to the great outbreak among the natives which, there seems good reason to believe, had its origin, as far as we can trace it, in northeastern Siberia. Captain McGregor of the steam whaler *Karluk*, a trustworthy authority, states that there were many deaths in the early part of 1900 at a Russian trading post on Holy Cross Bay in the gulf of Anadir. From this point, he believes, the contagion was conveyed by dog sleds to Plover Bay and other places on the Siberian coast, whence infected natives were carried on whaling vessels to the mainland of Alaska as well as to the inhabited islands in the northern part of Bering Sea. Cape Tchaplín, where the natives were reported as "dying like sheep," Cape Serdze, East Cape, and Plover Bay were among the Siberian points affected by the epidemic. In June, 1900, Siberian natives, ill of measles, were observed on at least 2 whaling vessels in the Bering Sea and later, in the same month, the disease made its appearance at several native settlements in northwestern Alaska.

Reports as to the prevalence of the epidemic on the Arctic shores of Alaska differ so irreconcilably that I shall pass over this section without comment. The infection was speedily introduced into the Diomedé Islands, St. Lawrence Island, and King Island in the northern Bering Sea. Practically all the Eskimos dwelling along the coast of the Bering Sea from Cape Prince of Wales to Nome suffered severely from the infection. According to the private records of the physicians of Nome, the first case of measles appeared in that town during the latter part of June. Here the white population overwhelmingly predominates in numbers over the native Eskimos; and it is of interest to note that while the cases among the whites were comparatively few in number and attended by no mortality, the natives, almost without exception, fell a prey to the disease with a death rate, in the recorded cases, of exactly 50 per cent.

From Nome the contagion rapidly spread down the coast, many deaths being reported in the neighborhood of St. Michael, thence, following the trail of native settlements, up to the great rivers of Alaska, the Yukon and the Kuskokwim. From the valley of the Yukon comes the familiar tale of depopulated settlements, almost universal susceptibility and excessive mortality. By the time of the closure of navigation on this river for the season of 1900, the epidemic had progressed well up to the Canadian frontier. The medical officer of health of Yukon Territory communicates that measles was prevalent among the Indians in his jurisdiction during the year 1901. Whether, as seems possible, this outbreak may be connected with the great Alaskan epidemic of the preceding year, I have been unable to determine.

The Rev. Mr. Kilbuck, a missionary, long resident on the Kuskokwim, graphically described to me the ravages of the epidemic in that section. The disease made its appearance about the middle of August,

1900, the entire native population, without exception, being affected. The death rate was not less than 33 per cent.

Measles was probably introduced into Unalaska from St. Michael by the steamer *Rainier*, which arrived on July 26. The first Aleut to contract the disease seems to have sickened on August 14, indicating a maximum incubation period of nineteen days. As reported to the Bureau at the time, 9 typical cases of measles came under my observation on August 18 and subsequently abundant opportunity for the study of the disease presented itself. Within a month 10 per cent of the native inhabitants had died and later reports show that the total number of deaths which could fairly be ascribed to measles or its complications closely approximated 40 per cent of the population. The rule of universal susceptibility exhibited a very few exceptions, in every case apparently to be attributed to an immunity due to a previous attack contracted either in the States or in an epidemic which is reported to have passed through the island in 1848. Among the white population of Unalaska, almost entirely adult, 1 case occurred in the person of an infant. The unprotected "creoles" or half-breeds seemed to be equally as susceptible as the natives. The disease as observed among the Aleuts presented no unusual symptoms save the extremely severe bronchial involvement specially marked in the fatal cases. From Unalaska, the principal village of the Aleuts, the infection was carried to all the settlements of this tribe, with the exception of Attu Island, the most westerly of the Aleutian group.

During September, 1900, the disease ran through the Pribilof Islands, where it was introduced from Unalaska by the steamer *Homer*. Measles was reported on Nunivak Island, as well as on the mainland of the Alaskan peninsula at Morzhovia and Belkofsky. The epidemic does not seem to have extended along the southern coast of Alaska farther east than Port Wrangell, a native village about 130 miles east of Unga. Thus it appears that the epidemic was confined to the territory occupied by the Eskimo race, the Aleuts being regarded as one of its offshoots.

The outbreak of the epidemic on the small and commercially isolated Aleutian island of Akutan, concerning which exact data have been secured, presents points of interest. The contagion was conveyed from Unalaska by the schooner which supplies the station. Without exception, everybody on the island, which has a total population of 64, contracted the disease, only 2 cases, both in children, terminating fatally. The death rate at this place was, therefore, the least which my records show.

In conclusion, the available reports seem to clearly indicate that in the affected settlements a very small proportion of the native population, probably much less than 2 per cent, failed to contract the prevailing epidemic. Scarcely less than 30 per cent, as an average, succumbed to the disease. A mortality approximating 50 per cent seems to have been not uncommon. At one or two points the death rate has been placed at the almost incredible figure of 90 per cent. The death rate of 3 per cent on Akutan seems an entirely unparalleled minimum.

This melancholy history illustrates the almost universal susceptibility to the infection of measles existing among unprotected peoples and the prominent rôle that this disease is capable of playing in the extinction of communities heretofore isolated from the main body of the human family.

Inspection service at Eastport, Me.

EASTPORT, ME., January 9, 1902.

SIR: I beg to submit the following report of work done at this inspection station during the week ended Thursday, January 9, 1902:

Vessels inspected.

Date.	Vessel.	From—	For—	Crew.	Passengers.	
					For Eastport.	In transit.
Jan. 7	Ss. St. Croix.....	Boston and Portland.	Eastport and St. John, New Brunswick.	61	46	35
Jan. 8	Ss. Aurora.....	St. John, New Brunswick.	Eastport and Grand Manan, New Brunswick.	8	1	1

The steamship *St. Croix*, due here to day from St. John, New Brunswick, is delayed there owing to some derangement of machinery.

Eastport is still free from smallpox. I am watching these steamships closely.

Respectfully,

EDWARD M. SMALL,
Acting Assistant Surgeon, U. S. M. H. S.

Inspection service at Vanceboro, Me., and vicinity.

VANCEBORO, ME., January 4, 1902.

SIR: During the week just closed I have inspected approximately 600 passengers, vaccinated 34, and disinfected 19 pieces of baggage.

The situation in St. John, New Brunswick, seems to have improved during the week, but there has been quite an extended outbreak of smallpox in Halifax, and some cases have occurred in Albert County, New Brunswick, resulting from exposures in St. John. Nearly all St. John people who wish to enter the United States at this point are vaccinated prior to leaving home, and the majority carry no baggage. This, I am told, is not so much due to extension of vaccination at St. John as to dislike of vaccination at this point. * * *

Respectfully,

M. L. YOUNG,
Acting Assistant Surgeon, U. S. M. H. S.

REPORTS FROM THE MEXICAN BORDER.

Eagle Pass, Tex., January 6, 1902—Inspection service.—I have the honor to report the following transactions at this port for the week ended January 4, 1902: Number of passenger trains from Mexico inspected, 7; number of passengers on trains from Mexico inspected and passed, 167; number of passengers detained, none.

B. KINSELL,
Acting Assistant Surgeon, U. S. M. H. S.

El Paso, Tex., January 4, 1902—Inspection service.—I have the honor to transmit the following summary of transactions at this station for the week ended January 4, 1902: Inspection of Mexican Central Railroad passengers, 158; inspection of Rio Grande and Pacific Railroad passengers, 18; inspection of immigrants, 95; disinfection of blankets, clothing, etc., of immigrants, 42 pieces; disinfection of soiled linen imported for laundry work, 397 pieces; disinfection of Pullman soiled linen, 4,016 pieces; vaccination of immigrant children, 2.

E. ALEXANDER,
Acting Assistant Surgeon, U. S. M. H. S.

Statistical reports of States and cities of the United States—Yearly and monthly.

GEORGIA—*Columbus*.—Month of December, 1901. Population, 19,303—white, 10,276; colored, 9,027. Total number of deaths, 26—white, 13; colored, 13, including scarlet fever, 1, and 3 from phthisis pulmonalis.

KANSAS—*Leavenworth*.—Month of December, 1901. Census population, 21,556. Total number of deaths, 30, including diphtheria, 1; enteric fever, 3, and 2 from tuberculosis.

Wichita.—Two weeks ended December 31, 1901. Census population, 24,761. Total number of deaths, 28, including enteric fever, 1, and 2 from tuberculosis.

MARYLAND—*Cumberland*.—Month of December, 1901. Census population, 12,727. Total number of deaths, 31, including diphtheria, 1; enteric fever, 1; measles, 1; whooping cough, 1, and 2 from tuberculosis.

MASSACHUSETTS—*Holyoke*.—Month of December, 1901. Census population, 45,712. Total number of deaths, 59, including diphtheria, 1; enteric fever, 2; scarlet fever, 1, and 8 from tuberculosis.

Newton.—Month of December, 1901. Census population, 33,587. Total number of deaths, 38, including diphtheria, 1; enteric fever, 1, and 2 from phthisis pulmonalis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended January 4, 1902, from 80 observers indicate that pneumonia and scarlet fever were more prevalent and erysipelas, intermittent fever, and inflammation of kidney were less prevalent than in the preceding week. Cerebro-spinal meningitis was reported present at 6, whooping cough at 19, measles at 24, diphtheria at 28, enteric fever at 43, scarlet fever at 113, smallpox at 113, and phthisis pulmonalis at 200 places.

MISSOURI—*St. Louis*.—Month of November, 1901. Estimated population, 598,000—white, 560,000; colored, 38,000. Total number of deaths, 808—white, 708; colored, 100—including diphtheria, 25; enteric fever, 27; scarlet fever, 6; whooping cough, 2, and 123 from tuberculosis.

NEW JERSEY—*Paterson*.—Month of October, 1901. Census population, 105,171. Total number of deaths, 145, including enteric fever, 4; whooping cough, 2, and 16 from phthisis pulmonalis.

Month of November, 1901. Total number of deaths, 133, including diphtheria, 2, and 8 from phthisis pulmonalis.

NEW YORK.—Reports to the State board of health, Albany, for the month of November, 1901, from 156 cities, towns, and villages having an aggregate estimated population of 7,268,000, show a total of 9,309 deaths, including diphtheria, 331; enteric fever, 147; measles, 49; scarlet fever, 81; whooping cough, 39, and 1,063 from phthisis pulmonalis.

Auburn.—Month of December, 1901. Census population, 30,345.

Total number of deaths, 31, including enteric fever, 1, and 8 from tuberculosis.

Saratoga Springs.—Month of December, 1901. Estimated population, 12,500. Total number of deaths not reported. One death from enteric fever reported.

NORTH CAROLINA.—Reports to the State board of health for the month of November, 1901, from 21 towns, having an aggregate estimated population of 118,290—white, 71,090; colored, 47,200—show a total of 190 deaths—white, 88; colored, 102—including diphtheria, 3; enteric fever, 3; scarlet fever, 3, and 30 from tuberculosis.

PENNSYLVANIA—*New Castle*.—Month of December, 1901. Census population, 28,329. Total number of deaths, 34, including enteric fever, 1, and 10 from tuberculosis.

TENNESSEE—*Knoxville*.—Month of December, 1901. Estimated population, 35,000—white, 26,000; colored, 9,000. Total number of deaths, 54—white, 37; colored, 17—including diphtheria, 2; scarlet fever, 3, and 12 from tuberculosis.

VIRGINIA—*Lynchburg*.—Month of December, 1901. Estimated population, 30,000. Total number of deaths, 34, including diphtheria, 2, and 4 from phthisis pulmonalis.

Petersburg.—Month ended December 26, 1901. Estimated population, 25,000. Total number of deaths, 28, including scarlet fever, 1, and 6 from tuberculosis.

Roanoke.—Month of December, 1901. Census population, 21,485. Total number of deaths, 29, including 4 from tuberculosis.

*Report of immigration at Boston for the week ended January 4, 1902.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of Boston, January 5, 1902.**Number of alien immigrants who arrived at this port during the week ended January 4, 1902
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 29	Steamship Boston.....	Yarmouth, Nova Scotia.....	129
Dec. 30	Steamship Admiral Dewey.....	Port Morant, Jamaica.....	8
Jan. 2	Steamship Boston.....	Yarmouth, Nova Scotia.....	77
Jan. 3	Steamship Bonavista.....	Halifax, Nova Scotia.....	17
	Total.....		231

GEORGE B. BILLINGS,
*Commissioner.**Report of immigration at New York for the week ended December 21, 1901.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of New York, December 28, 1901.**Number of alien immigrants who arrived at this port during the week ended December 21, 1901;
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 15	Steamship Etruria.....	Liverpool and Queenstown.....	98
Do....	Steamship Pretoria.....	Hamburg.....	1,440
Dec. 16	Steamship La Bretagne.....	Havre.....	453
Do....	Steamship Trojan Prince.....	Naples.....	564
Dec. 17	Steamship Vaderland.....	Antwerp.....	690
Dec. 18	Steamship Hohenzollern.....	Genoa and Naples.....	500
Do....	Steamship Victoria.....	Naples.....	328
Do....	Steamship Amsterdam.....	Rotterdam.....	402
Dec. 20	Steamship Germanic.....	Liverpool and Queenstown.....	91
Do....	Steamship Lauro.....	Glasgow.....	109
Dec. 21	Steamship Barbarossa.....	Bremen.....	833
Do....	Steamship Campania.....	Liverpool and Queenstown.....	184
Do....	Steamship Philadelphia.....	Southampton.....	148
Do....	Steamship Patria.....	Marseille and Naples.....	287
Do....	Steamship Furst Bismarck.....	Genoa and Naples.....	331
Do....	Steamship La Savoie.....	Havre.....	558
Do....	Steamship Dona Maria.....	Lisbon and the Azores.....	135
Do....	Steamship Sicilia.....	Genoa and Naples.....	451
	Total.....		7,572

EDW. F. MCSWEENEY,
Acting Commissioner.

*Report of immigration at New York for the week ended January 4, 1902.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of New York, January 6, 1902.**Number of alien immigrants who arrived at this port during the week ended January 4, 1902;
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 30	Steamship St. Paul.....	Southampton	125
Do....	Steamship Umbria	Liverpool and Queenstown	79
Do....	Steamship Tartar Prince.....	Naples.....	349
Dec. 31	Steamship Ryndam.....	Rotterdam	310
Do....	Steamship Gallia.....	Naples.....	185
Do....	Steamship La Champagne.....	Havre.....	298
Do....	Steamship Citta di Torino.....	Naples.....	593
Jan. 2	Steamship Trave.....	Genoa and Naples.....	330
Do....	Steamship Zeeland.....	Antwerp	416
Jan. 4	Steamship Pisa.....	Hamburg	312
	Total		2,997

THOMAS FITCHIE,
*Commissioner.**Report of immigration at Philadelphia for the week ended January 4, 1902.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of Philadelphia, January 4, 1902.**Number of alien immigrants who arrived at this port during the week ended January 4, 1902; also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Jan. 1	Steamship Belgenland.....	Liverpool	83
Jan. 3	Steamship Geestemunde.....	Shields, England.....	5
	Total.....		88

JNO. J. S. RODGERS,
*Commissioner.**Report of immigration at Philadelphia for the week ended January 11, 1902.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of Philadelphia, January 11, 1902.**Number of alien immigrants who arrived at this port during the week ended January 11, 1902; also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Jan. 6	Steamship Waesland.....	Liverpool.....	31
Jan. 8	Steamship Manchester Corporation..	Manchester.....	2
Do....	Steamship Korona.....	St. Kitts.....	1
Jan. 9	Steamship Siberian.....	Glasgow.....	1
Do....	Steamship Ethelbryhta.....	Tampico.....	1
	Total		36

JNO. J. S. RODGERS,
Commissioner.

Report of immigrants inspected at the port of San Diego, Cal., during the month of December, 1901.

Total number of immigrants inspected, 8; number passed, 8.

C. E. DECKER,
Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Key West, Fla., during the month of December, 1901.

Total number of immigrants inspected, 1; number passed, 1.

R. D. MURRAY,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of New Orleans, La., during the month of December, 1901.

Total number of immigrants inspected, 79; number passed, 79.

C. P. WERTENBAKER,
Passed Assistant Surgeon, U. S. M. H. S.,
Commanding Station.

Report of immigrants inspected at the port of Portland, Me., during the month of December, 1901.

Total number of immigrants inspected, 131; number passed, 131.

S. D. BROOKS,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Baltimore, Md., during the month of December, 1901.

Total number of immigrants inspected, 2,640; number passed, 2,638; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 2.

H. R. CARTER,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Boston, Mass., during the month of December, 1901.

Total number of immigrants inspected, 729; number passed, 729.

FAIRFAX IRWIN,
Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Eagle Pass, Tex., during the month of December, 1901.

Total number of immigrants inspected, 138; number passed, 133; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 5.

B. KINSELL,
Acting Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of El Paso, Tex., during the month of December, 1901.

Total number of immigrants inspected, 560; number passed, 556; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 4.

E. ALEXANDER,
Acting Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Galveston, Tex., during the month of December, 1901.

Total number of immigrants inspected, 69; number passed, 67; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, 2.

C. E. D. LORD,
Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Port Townsend, Wash., during the month of December, 1901.

Total number of immigrants inspected, 34; number passed, 34.

C. H. GARDNER,
Passed Assistant Surgeon, U. S. M. H. S.

Reports from national quarantine

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
	UNITED STATES:				
1	Alexandria, Va.....	Jan. 11
2	Apalachicola, Fla.....	Jan. 4
3	Beaufort, N. C.....	Jan. 8
4	Biscayne Bay, Fla.....	Jan. 4
5	Boca Grande, Fla.....	do.....
6	Brunswick, Ga.....	do.....
7	Cape Charles, Va.....	do.....
8	Cape Fear, N. C.....	do.....
9	Cedar Key, Fla.....	Dec. 21
10	Columbia River, Oreg.....	Jan. 4
11	Cumberland Sound, Fla.....	do.....
12	Delaware Breakwater Quarantine, Lewes, Del.	do.....
13	Dutch Harbor, Alaska.....
14	Eureka, Cal.....	Dec. 28
15	Grays Harbor, Wash.....	Jan. 4
16	Gulf Quarantine, Ship Island, Miss.	do.....	Nor. bk. Amerika.....	Jan. 3	Rio de Janeiro.....
17	Key West, Fla.....	do.....	Nor. ship Helios.....	Jan. 4	Lorenzo Marquez
18	Los Angeles, Cal.....	Dec. 28
		Jan. 4
19	Newbern, N. C.....	Dec. 28
20	Pascagoula, Miss.....	Jan. 4
21	Port Angeles, Wash.....	Dec. 28
22	Port Townsend, Wash.....	Jan. 4	Am. ship Kenilworth (a).....	Dec. 14	Soerabaya.....
			Br. ss. Glengarry.....	Jan. 2	Hongkong.....
23	Punta Grande, Fla.....	Jan. 4
24	Punta Rasa, Fla.....	do.....
25	Reedy Island, Del.....	do.....
26	St. Georges Sound, Fla.....	Dec. 31
		Jan. 7
27	St. Johns River, Fla.....	Jan. 4
28	San Diego, Cal.....	do.....
29	San Francisco, Cal.....	Dec. 28
30	San Pedro, Cal.....	do.....
		Jan. 4
31	Savannah, Ga.....	Dec. 28	Am. sc. J. E. Du Bignon (a) Br. sc. J. H. Hutt Br. ss. Cynthia.....	Dec. 28 Dec. 30 Jan. 2	Cardenas. Havana New York.....
32	South Atlantic Quarantine, Blackbeard Island, Ga.	Jan. 4
33	Tampa Bay, Fla.....	do.....
34	Washington, N. C.....	do.....
	CUBA:				
35	Baracoa.....	Dec. 28
36	Batabano.....	do.....
37	Calbarien.....	do.....
38	Cardenas.....	do.....
39	Casilda.....	do.....
40	Cienfuegos.....	do.....

a Previously reported.

and inspection stations.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No transactions.....	
2				do.....	
3				No report.....	
4					2
5				No transactions.....	
6					5
7					1
8				No transactions.....	
9				No report.....	
10					5
11				No report.....	
12				No transactions.....	
13				No report.....	
14					1
15					1
16	Ship Island.....	Held for disinfection.....			2
17	do.....	Disinfected and held.....		To kill rats.....	
18					7
19					3
20					1
21				No transactions.....	
22	Tacoma.....	Ballast discharged; hold disinfected; water supply changed and disinfected.	Dec. 29	No transactions.....	7
	do.....	Sulphurized to kill rats.....	Jan. 3	Glandular region of oriental crew examined. Glandular region of all Orientals on Br. ss. Duke of Fife and Jap. ss. Tosa Maru, from Hongkong, examined.	5
23				No report.....	
24				do.....	
25					12
26					2
27					2
28				No transactions.....	
29				Physical examination of fore-castle crew and steerage passengers on Jap. ss. America Maru from Hongkong; 3 cases measles. Malarial fever on Am. ss. Kennebec from Acapulco.	1
30				No transactions.....	24
31	Savannah.....	Fumigated.....	Dec. 29	do.....	
	do.....	do.....	Dec. 31		10
	do.....	do.....	Jan. 3	Physical examination of oriental crew on Ger. ss. Barenfels from New York via Newport News.	
32					1
33				No transactions.....	
34				do.....	
35				No report.....	
36					3
37				9 vessels passed without inspection.	1
38				10 vessels passed without inspection.	
39					11
40				3 vessels passed without inspection.	10

Reports from national quarantine

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure
	CUBA—Continued.				
41	Daiquiri.....	Dec. 14
		Dec. 21
42	Gibara	Dec. 23
43	Guantanamo.....	Dec. 21
44	Havana	Jan. 4
45	Isabela de Sagua.....	Dec. 23
46	Manzanillo.....	Dec. 21
47	Matanzas	Dec. 23
48	Nuevitas	do
49	Puerto Padre.....	do
50	Santa Cruz.....	Dec. 21
51	Santiago de Cuba	do	Prov. flag ss. Julia.....	Dec. 15	Havana
	HAWAII:				
52	Hilo.....	Dec. 14
53	Honolulu.....	Dec. 21
54	Kahului.....	do
55	Kihel, Maui.....	do
56	Koloa, Kauai.....	do
57	Lahaina.....	do
	PHILIPPINES:				
58	Cebu.....	Nov. 23
59	Iloilo.....	do
60	Manila.....	do
	PORTO RICO:				
61	Ponce.....	Dec. 23	Fr. ss. Le Calvados.....	Dec. 26	Cape Haitien.....
62	San Juan.....	do	U. S. S. Marietta	Dec. 27	Colon.....
			Fr. ss. Le Calvados.....	Dec. 28	do
	Subports—				
63	Aguadilla.....	do
64	Arecibo.....	do
65	Arroyo.....	do
66	Fajardo.....	do
67	Humacao.....	do
68	Mayaguez.....	do

and inspection stations—Continued.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
41				No transactions.....	3
42				No report.....	
43				4 vessels passed without inspection.....	
44				No report.....	
45				12 vessels passed without inspection.....	1
46				3 vessels passed without inspection.....	4
47				2 vessels passed without inspection.....	2
48				No report.....	
49				do.....	
50				do.....	6
51	San Juan.....	Disinfected.....	Dec. 15	5 vessels passed without inspection.....	5
52				No transactions.....	
53					13
54					1
55				No transactions.....	
56					1
57				No transactions.....	
58				No report.....	
59				do.....	
60				do.....	
61	St. Nazaire.....	Held in quarantine.....	Dec. 27	Disinfected 1 packet of mail.	2
62	San Juan.....	Boarded and passed.....	do.....	On medical officer's certificate.	2
	do.....	Held in quarantine.....	Dec. 28		
63				No report.....	
64				do.....	
65				do.....	
66				do.....	
67				do.....	
68				do.....	

Reports from State and

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
1	Baltimore, Md	Jan. 11
2	Bangor, Me	do.....
3	Boston, Mass	do.....
4	Charleston, S. C.	Jan. 4
5	Elizabeth River, Va.	Jan. 11
6	Galveston, Tex.	Jan. 4
7	Gardiner, Oreg.	do.....
8	Marcus Hook, Pa.	Jan. 11
9	Mobile Bay, Ala.	Dec. 28
10	New Bedford, Mass.	do.....
11	New Orleans, La.	do.....	Br. ss. Barrister.....	Dec. 21	Liverpool
			Br. ss. Capella	Dec. 26	Liverpool via Belize and other Mexican ports.
			Sp. ship Remedios Pas- cual.....	do.....	Buenos Ayres.....
			Br. ss. Floridian.....	do.....	Liverpool via Co- lombian and Cuban ports.
			Br. ss. Antillian.....	Dec. 27	Liverpool via West Indian and Mexican ports.
			Br. ss. Tactician	do.....	Port Elizabeth....
			Br. ss. Mount Royal	Dec. 28	Durban.....
			Br. ss. Monterey	do.....	East London.....
12	Newport News, Va	Jan. 11	Jan. 4
13	Newport, R. I.	do.....	do.....
14	New York, N. Y.	do.....	do.....
15	Pass Cavallo, Tex.	do.....	do.....
16	Port Royal, S. C.	do.....	do.....
17	Providence, R. I.	do.....	do.....
18	Quintana, Tex.	do.....	do.....
19	Sabine Pass, Tex.	do.....	do.....
20	St. Helena Entrance, S. C.	do.....	do.....

municipal quarantine stations.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No report.	
2				do	
3				do	
4					3
5				No report	
6					9
7				No report.	
8				do	
9				do	
10				do	
11	New Orleans	Disinfected.	Dec. 24		
	do	do	Dec. 26		
	do	do	do		
	do	do	do		
	do	do	Dec. 27		
	do	do	do		
	do	do	Dec. 28		
	do	do	do		
12				No report.	
13				do	
14				do	
15				do	
16				do	
17				do	
18				do	
19				do	
20				do	

Smallpox in the United States as reported to the Surgeon-General United States Marine-Hospital Service, December 28, 1901, to January 17, 1902.

[For reports received from June 29, 1901, to December 27, 1901, see PUBLIC HEALTH REPORTS for December 27, 1901.]

Place.	Date.	Cases.	Deaths.	Remarks.
California:				
San Francisco.....	Dec. 16-Dec. 22...	9		
Colorado:				
Arapahoe County.....	Dec. 1-Dec. 31...	1		
Archulete County.....	do	2		
Chaffee County.....	do	1		
Clear Creek County.....	do	2		
Delta County.....	do	22		
El Paso County.....	do	16		
Fremont County.....	do	1		
Gilpin County.....	do	27		
Gunnison County.....	do	11		
Hinsdale County.....	do	20		
Jefferson County.....	do	3		
La Plata County.....	do	1		
Las Animas County.....	do	6		
Montrose County.....	do	11		
Morgan County.....	do	1		
Pueblo County.....	do	1		
San Miguel County.....	do	6		
Teller County.....	do	3		
Total for State.....		135		
Total for State, same period, 1901.		45		
Illinois:				
Springfield.....	Dec. 1-Dec. 31...	125		
Total for State, same period, 1901.		26		
Indiana:				
Vanderburg County.....	Dec. 15-Dec. 28...	9		
Kentucky:				
Lexington.....	Dec. 22-Dec. 28...	4	2	
Total for State, same period, 1901.		10		
Louisiana:				
New Orleans.....	Dec. 15-Dec. 28...	2		
Shreveport.....	do	5		
Total for State.....		7		
Total for State, same period, 1901.		19	3	
Maine:				
Portland.....	Dec. 22-Dec. 28...	1		
Massachusetts:				
Boston.....	do	27	8	
Cambridge.....	Dec. 15-Dec. 28...	4		
Fall River.....	Dec. 22-Dec. 28...	1		
Malden.....	Dec. 15-Dec. 21...	1		
Medford.....	Dec. 22-Dec. 28...	1		
Quincy.....	do	4		
Woburn.....	Dec. 15-Dec. 21...	1		
Total for State.....		39	8	
Michigan:				
Grand Rapids.....	Dec. 15-Dec. 21...	1		
Minnesota:				
Aitkin County.....	Dec. 3-Dec. 23...	4		
Anoka County.....	do	13		
Becker County.....	do	5		
Beltrami County.....	do	6		
Big Stone County.....	do	3		
Carver County.....	do	88	2	
Cass County.....	do	8		
Clay County.....	do	79		
Cottonwood County.....	do	4		
Crow Wing County.....	do	14	1	
Dakota County.....	do	2		

Smallpox in the United States, etc.—Continued.

Place,	Date,	Cases,	Deaths,	Remarks.
<i>Minnesota—Continued.</i>				
Faribault County	Dec. 3-Dec. 23...	24	
Goodhue County	do	4	
Hennepin County (Minneapolis)	do	28	1	
Houston County	do	16	
Hubbard County	do	10	
Itasca County	do	6	
Jackson County	do	20	
Kittson County	do	21	
Lyon County	do	9	
McLeod County	do	1	
Marshall County	do	34	
Martin County	do	6	
Meeker County	do	2	
Millelacs County	do	11	
Mower County	do	47	
Norman County	do	32	1	
Olmsted County (Rochester)	do	7	
Ottertail County	do	73	
Pipestone County	do	27	
Polk County	do	22	
Ramsey County (St. Paul)	do	2	
Red Lake County	do	56	1	
Red Wood County	do	3	
Renville County	do	1	
Rice County	do	6	
St. Louis County (Duluth)	do	26	1	
Scott County	do	5	
Sibley County	do	1	
Stearns County	do	9	
Steele County	do	4	
Todd County	do	2	
Traverse County	do	1	
Wabasha County	do	3	
Wadena County	do	8	
Winona County (Winona)	do	3	
Total for State		756	7	
Total for State, same period, 1901.		44	3	
<i>Missouri:</i>				
St. Louis	Dec. 16-Dec. 30...	109	1	
Total for State	
Total for State, same period, 1901.		14	
<i>Nebraska:</i>				
Omaha	Dec. 15-Dec. 28...	33	
Total for State, same period, 1901.		457	4	
<i>New Hampshire:</i>				
Nashua	Dec. 15-Dec. 28...	2	
Total for State, same period, 1901.		46	
<i>New Jersey:</i>				
Camden County	Dec. 22-Dec. 28...	16	3	
Essex County (Newark)	Dec. 15-Dec. 28...	54	18	
Passaic	Nov. 16-Dec. 28...	4	1	
Total for State		74	22	
Total for State, same period, 1901.		7	
<i>New York:</i>				
Binghamton	Dec. 22-Dec. 28...	1	
Buffalo	June 25-Dec. 17...	107	
New York	Dec. 15-Dec. 28...	31	5	
Plattsburg	Dec. 1-Dec. 28...	19	
Total for State		158	5	
Total for State, same period, 1901.		43	2	
<i>North Carolina:</i>				
Buncombe County	Nov. 1-Nov. 30...	14	
Cabarrus County	do	46	
Duplin County	do	8	

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<i>North Carolina—Continued.</i>				
Durham County	Nov. 1-Nov. 30...	3	Several cases.
Gaston County.....	do	
Henderson County	do	6	Many cases.
Iredell County	do	
Mecklenburg County	do	20	
Nash County	do	12	
Rockingham County	do	5	
Sampson County.....	do	1	
Wayne County.....	do	25	
Total for State		140	
Total for State, same period, 1901.		101	2	
<i>Ohio:</i>				
Ashtabula County—				
Ashtabula	Aug. 1-Dec. 20...	4	
Saybrook Township.....	do	7	
Ashland County—				
Lake Township.....	do	
Auglaize County—				
St. Marys.....	do	2	
Belmont County—				
Barnesville.....	do	14	
Bridgeport	do	3	
St. Clairsville.....	do	3	
Carroll County—				
Rose Township.....	do	3	1	
Champaign County—				
Urbana	do	2	
Clark County—				
Springfield	do	1	
Clermont County—				
Miami Township.....	do	
Coshocton County—				
White Eyes Township.....	do	
Crawford County—				
Auburn Township.....	do	
Crestline	do	
New Washington	do	
Cuyahoga County—				
Berea	do	
Cleveland.....	do	4	
Glenville	do	
Middleburg Township.....	do	
Rocky River.....	do	
Darke County—				
Jackson Township.....	do	3	
Union City.....	do	27	
Delaware County—				
Delaware.....	do	4	
Erie County—				
Sandusky.....	do	4	
Franklin County—				
Columbus.....	do	3	
Gallia County—				
Gallipolis.....	do	
Harrison Township.....	do	
Greene County—				
Cedarville Township.....	do	1	
Hamilton County—				
Cincinnati.....	do	23	
Mill Creek Township.....	do	1	
Pleasant Ridge	do	1	
Symmes Township.....	do	1	
Hancock County—				
Allen Township.....	do	1	
Findlay	do	45	2	
Hardin County—				
Ada	do	
Kenton	do	
Liberty Township.....	do	
McDonald Township	do	
Henry County—				
Napoleon.....	do	
Hocking County—				
Logan	do	
Huron County—				
Chicago Junction	do	3	

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<i>Ohio—Continued.</i>				
Jackson County—				
Jefferson Township	Aug. 1-Dec. 20...	7		
Madison Township	do			
Oakhill	do			
Jefferson County—				
Mingo Junction	do	1		
Knox County—				
Wayne Township	do	11		
Lake County—				
Mentor	do			
Lawrence County—				
Aid Township	do	9		
Ironton	do			
Licking County—				
Eden Township	do	1		
Hanover Township	do	8		
Newark	do	54		
Newton Township	do	1		
Utica	do	1		
Logan County—				
Belle Center	do	2		
Richland Township	do	3		
West Mansfield	do	1		
Lorain County—				
Black River Township	do			
Lorain	do			
Russia Township	do	8		
Lucas County—				
Toledo	do			
Mahoning County—				
Youngstown	do	7		
Mercer County—				
Butler Township	do	45		
Coldwater	do	40		
Washington Township	do	1		
Monroe County—				
Benton Township	do			
Bethel Township	do	6		
Franklin Township	do			
Graysville	do			
Perry Township	do			
Washington Township	do			
Montgomery County—				
Butler Township	do			
Dayton	do	1		
Germantown	do	2		
Washington Township	do			
Morrow County—				
Cardington	do	1		
Muskingum County—				
Zanesville	do	1		
Perry County—				
New Lexington	do	4		
Portage County—				
Brimfield Township	do			
Putnam County—				
Continental	do			
Perry Township	do			
Richland County—				
Madison Township	do	2		
Plymouth Township	do			
Sandusky County—				
Clyde	do	1		
Fremont	do			
Gibsonburg	do	25		
Madison Township	do	1		
Scioto County—				
Portsmouth	do			
Seneca County—				
Postoria	do			
Loudon Township	do	4		
Tiffin	do			
Shelby County—				
Green Township	do			
Orange Township	do	1		
Perry Township	do			
Sidney	do	2		
Stark County—				
Canton	do	1		
Massillon	do	1		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<i>Ohio—Continued.</i>				
<i>Stark County—Continued.</i>				
Sandy Township.....	Aug. 1-Dec. 20...	1		
Waynesburg.....	do	1		
<i>Tuscarawas County—</i>				
Fairfield Township.....	do			
Mineral City.....	do	8	2	
Uhrichsville.....	do	3		
<i>Union County—</i>				
Magnetic Springs.....	do	1		
<i>Van Wert County—</i>				
Van Wert.....	do	5	1	
<i>Washington County—</i>				
Barlow Township.....	do			
Belpre Township.....	do			
Liberty Township.....	do			
Marietta.....	do			
<i>Wayne County—</i>				
Creston.....	do	6		
<i>Williams County—</i>				
Montpeiler.....	do			
<i>Wood County—</i>				
Center Township.....	do	10		
Henry Township.....	do			
North Baltimore.....	do	2		
Troy Township.....	do			
Webster Township.....	do			
<i>Wyandot County—</i>				
Carey.....	do	1		
Total for State		451	6	
Total for State, same period, 1901.		101	1	Total number of cases January 1 to Decem- ber 20, 1901, 2,936; deaths, 48.
<i>Pennsylvania:</i>				
Lebanon County	Dec. 22-Dec. 28...	35		
Luzerne County	Dec. 25-Dec. 31...	11		
Montgomery County	Dec. 22-Dec. 28...	5		
Philadelphia County.....	do	79	19	
Total for State.....		130	19	
Total for State, same period, 1901.		12		
<i>Rhode Island:</i>				
Manville	Dec. 1-Dec. 30...	3		
Providence.....	do	1		
Woonsocket	do	5		
Total for State		9		
Total for State, same period, 1901.		3	1	
<i>South Carolina:</i>				
Greenville.....	Dec. 15-Dec. 21...	2		
Total for State, same period, 1901.		1		
<i>Tennessee:</i>				
McMinn County	Dec. 15.....	24		
Polk County	do	4		
Shelby County (Memphis)	Dec. 22-Dec. 28...	2		
Total for State		30		
Total for State, same period, 1901.		22	1	
<i>Utah:</i>				
Salt Lake City	Dec. 15-Dec. 28...	4		
Total for State, same period, 1901.		117		
<i>Vermont:</i>				
Burlington.....	Dec. 15-Dec. 21...	55		
<i>Washington:</i>				
King County.....	Nov. 1-Dec. 15...	12		
Klickitat County	Nov. 1-Dec. 1...	8		
Lincoln County.....	Nov. 1-Dec. 13...	35	1	
Pierce County (Tacoma).....	Nov. 1-Dec. 29...	3		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases	Deaths.	Remarks.
<i>Washington—Continued.</i>				
Spokane County (Spokane)....	Nov. 1-Dec. 29...	20		
Whitman County.....	Nov. 1-Dec. 6...	5		
Total for State		83	1	
Total for State, same period, 1901.		2		
<i>Wisconsin:</i>				
36 counties, 61 places.....	Jan. 1-Jan. 31...	239	1	
35 counties, 57 places.....	Feb. 1-Feb. 28...	256	3	
37 counties, 73 places.....	Mar. 1-Mar. 31...	304	1	
37 counties, 64 places.....	Apr. 1-Apr. 30...	276	2	
45 counties, 85 places.....	May 1-May 31...	358	0	
41 counties, 67 places.....	June 1-June 30...	288	3	
32 counties, 52 places.....	July 1-July 31...	268	0	
27 counties, 36 places.....	Aug. 1-Aug. 31...	128	2	
15 counties, 18 places.....	Sept. 1-Sept. 30...	71	3	
28 counties, 62 places.....	Oct. 1-Oct. 31...	519	2	
42 counties, 100 places.....	Nov. 1-Nov. 30...	596	3	
57 counties, 162 places.....	Dec. 1-Dec. 31...	1,012	2	
Total for State		4,315	22	
Total for State, same period, 1901.		31		
Grand total.....		6,680	93	
Grand total, same period, 1901.		2,238	21	

Plague in the United States as reported to the Surgeon-General, United States Marine-Hospital Service, from December 28, 1901 to January 17, 1902.

[For reports received from June 29, 1901, to December 27, 1901, see PUBLIC HEALTH REPORTS for December 27, 1901.]

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
<i>California:</i>				
San Francisco.....	Dec. 12	1		

Snow and ice bulletin for the week ended January 6, 1902.

[Received from Department of Agriculture, Weather Bureau—Depth of snow and thickness of ice at 8 p. m., January 6, 1902.]

Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.
	Inches.	Inches.		Inches.	Inches.
Arkansas:			Nebraska:		
Fort Smith	(a)		Omaha		7.0
Little Rock	(a)		New Hampshire:		
Connecticut:			Bethlehem	17	
New Haven	(a)		Chatham	12	
Storrs	(a)		Hanover	8	
West Simsbury	(a)		New York:		
Indiana:			Albany	3	9.0
Laporte	3		Beaver	11	
Iowa:			Binghamton	3	
Charles City	(a)		Bolivar	7	
Davenport	(a)	10.5	Buffalo	1	4.0
Des Moines	(a)		Canton	1	
Dubuque	(a)	14.0	Cortland	8	
Forest City	(a)		Franklinville	4	
Keokuk	(a)	10.0	Geneva	4	
Sibley	(a)		Griffins Corners	4	
Kansas:			Lake Placid	6	
Wichita	(a)		Lockport	3	
Maine:			Lowville	7	
Bangor	2		Malone	6	
Buckfield	3		New York:	(a)	
Eastport	(a)	6.0	Oswego	6	3.5
Fairfield	1		Plattsburg	3	
Gardiner	(a)	5.0	Port Henry	5	
Lewiston	(a)	6.0	Rochester	2	0.0
Orono	2		Saranac Lake	6	
Portland	(a)		Saratoga	2	
Massachusetts:			Seneca Falls	4	
Amherst	2		Watertown	3	
Fitchburg	2		North Dakota:		
Mansfield	(a)		Bismarck	1	?
North Adams	2		Williston	(a)	12.0
Michigan:			Ohio:		
Alpena	4	5.0	Cleveland	(a)	4.0
Big Rapids	1		Columbus		6.0
Detroit	1	11.5	Garrettsville	(a)	
Escanaba	3	10.0	Sandusky		9.5
Grand Haven	3	1.5	Toledo		7.0
Hillsdale	(a)		Pennsylvania:		
Houghton	11	9.5	Altoona	(a)	
Humboldt	6		Erie		4.5
Iron Mountain	5		Oil City	1	
Lansing	2		Philadelphia		1.5
Mackinaw	6		Scranton	(a)	
Mancelona	11		Warren	1	
Manistee	4		Rhode Island:		
Marquette	15	0.0	Kingston	(a)	
Port Huron	(a)	8.0	South Dakota:		
Saginaw	2		Pierre		10.0
Sault Ste. Marie	9	11.0	Vermont:		
South Haven	3		Brattleboro	6	10.0
Minnesota:			Northfield	12	
Albert Lea	1		St. Johnsbury	10	
Duluth	1	11.5	West Virginia:		
Evansville	(a)		Elkins	(a)	
Mapleplain	2		Wisconsin:		
Moorhead	7	19.0	Ashland	4	11.0
Northfield	1		Eau Claire	4	
St. Cloud	(a)		Green Bay	1	12.0
St. Paul	(a)	16.0	La Crosse	(a)	11.5
Missouri:			Medford	5	
Columbia	(a)		Menasha	2	
Hannibal		7.5	Milwaukee	(a)	0.0
Newhaven	(a)		New London	1	
Montana:			Portage	1	
Helena	(a)		Wausaukee	5	

a Indicates trace.

Weekly mortality table, cities of the United States.

Cities.	Week ended.	Population, U. S. census of 1900.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Yellow fever.	Smallpox.	Varicella.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Allegheny, Pa.	Jan. 4	129,896	39							1	2	3	
Ashtabula, Ohio	do.	12,949	7										
Baltimore, Md.	do.	508,957	183	22						3		1	1
Binghamton, N. Y.	do.	38,647	20	2								2	
Blackstone, Mass.	Jan. 8	9,000	0										
Boston, Mass.	Jan. 4	560,892	193	20		6					5	4	1
Brockton, Mass.	do.	40,063	10	2									
Burlington, Vt.	Jan. 28	18,641	8										
Cambridge, Mass.	Jan. 4	91,886	16	3							1		
Camden, N. J.	do.	75,935	28										
Carbondale, Pa.	Dec. 31	13,536	9									2	
Cincinnati, Ohio	Jan. 3	325,902	124	15						8	2	5	2
Chelsea, Mass.	Jan. 4	34,072	12							1			
Cleveland, Ohio	do.	381,766	82	3						2		3	
Clinton, Iowa	do.	22,698	17	1						1			
Clinton, Mass.	do.	13,667	6	1									
Dayton, Ohio	do.	85,333	40	4						1	1		
Detroit, Mich.	do.	285,704	5							1	4	1	
Elmira, N. Y.	do.	38,672	10							1		1	
Erie, Pa.	do.	52,733	10	1								1	
Evansville, Ind.	do.	59,007	15	7						1		1	
Fall River, Mass.	do.	104,863	21	4							1		
Freeport, Ill.	do.	13,258	2	1								1	
Galesburg, Ill.	do.	18,607	8										
Gloucester, Mass.	do.	26,121	6										
Green Bay, Wis.	Jan. 5	18,684	8	1		1					1		
Greenville, S. C.	Jan. 4	11,860	4										
Holyoke, Mass.	do.	45,712	19	2									
Jersey City, N. J.	Dec. 29	206,433	79	9		1						3	
Johnstown, Pa.	Jan. 4	35,936	7							1	1		
Joliet, Ill.	Jan. 7	29,353	8										
Lawrence, Mass.	Jan. 4	62,559	30	3									
Los Angeles, Cal.	Dec. 28	102,479	48	11						1		1	
Lowell, Mass.	Jan. 4	94,969	54	3								3	3
Lynchburg, Va.	do.	18,891	11	4									
McKeesport, Pa.	Jan. 7	34,227	15	2						1			
Malden, Mass.	Jan. 4	33,664	7	1						1			
Manchester, N. H.	do.	56,987	17	2									
Marlboro, Mass.	do.	13,609	5									3	
Massillon, Ohio	do.	11,944	2										
Medford, Mass.	do.	18,244	4	1									
Memphis, Tenn.	do.	102,320	45	8						1	1	1	
Michigan City, Ind.	Jan. 6	14,850	6										
Milwaukee, Wis.	Jan. 4	285,315	73	13						2		1	
Mobile, Ala.	do.	38,469	15	2						1			
Nashua, N. H.	do.	25,898	8									1	
Nashville, Tenn.	do.	80,865	31	8								1	
Newark, N. J.	do.	246,070	103	11		1				1		1	1
New Bedford, Mass.	do.	62,442	19	4									
New Orleans, La.	do.	287,104	122	17								1	
Newton, Mass.	do.	33,587	10										
New York, N. Y.	do.	3,437,202	1,292	139		2				10	17	41	25
Norristown, Pa.	do.	22,265	14	1		1				1			
North Adams, Mass.	do.	24,200	7	1									
Northampton, Mass.	do.	18,643	4										
Omaha, Nebr.	do.	102,555	24										1
Oneonta, N. Y.	do.	7,147	2										
Philadelphia, Pa.	do.	1,293,697	488	63		16				6	6	13	2
Plainfield, N. J.	do.	15,369	4										
Portland, Me.	do.	50,145	16	2									
Providence, R. I.	do.	175,597	57	8						1			
Quincy, Mass.	do.	23,899	7	1								3	1
Sacramento, Cal.	Dec. 28	29,282	11	1								1	
Salt Lake City, Utah	Jan. 4	53,531	19	1									
San Diego, Cal.	Dec. 28	17,700	5	1									
San Francisco, Cal.	Dec. 29	342,782	159	14									
Santa Barbara, Cal.	Dec. 28	6,587	3	1								5	
Shreveport, La.	Jan. 4	16,013	7										
Somerville, Mass.	do.	61,643	19	3								1	
South Bend, Ind.	do.	35,999	6										
Steeltown, Pa.	do.	12,068	1										
Tacoma, Wash.	Dec. 29	37,714	9	2									
Taunton, Mass.	Jan. 4	31,036	6	1									
Toledo, Ohio	do.	131,822	37	2						2		2	

Weekly mortality table, cities of the United States—Continued.

Cities.	Week ended.	Population, U. S. census of 1900.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Yellow fever.	Smallpox.	Varioloid.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles. Whooping cough.
Waltham, Mass.....	Jan. 4	23,481	3
Warren, Ohio.....	do.....	8,529	2
Washington, D. C.....	Dec. 28	278,718	105	7	5	1	1
Weymouth, Mass.....	do.....	11,324	1
Do.....	Jan. 4	11,324	1
Williamsport, Pa.....	do.....	28,757	4	1
Youngstown, Ohio.....	Dec. 28	44,885	20	1	2

Table of temperature and rainfall, week ended January 6, 1902.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	a Excess.	a Deficiency.	Normal.	Excess.	Deficiency.
Atlantic Coast:						
Eastport, Me.....	22	1		.84	.11	
Portland, Me.....	25	5		.77		.35
Northfield, Vt.....	18	8		.76		.64
Boston, Mass.....	28	6		.84		.17
New Haven, Conn.....	27	4		.93		.85
Albany, N. Y.....	25	6		.62		.54
New York, N. Y.....	31	4		.84		.74
Harrisburg, Pa.....	29	2		.77		.75
Philadelphia, Pa.....	32	4		.73		.61
New Brunswick, N. J.....	32	5		.84		.70
Atlantic City, N. J.....	33	4		.91		.83
Baltimore, Md.....	34	3		.77		.75
Washington, D. C.....	33	2		.76		.76
Lynchburg, Va.....	36	3		.83		.81
Cape Henry, Va.....	39	3		.92		.87
Norfolk, Va.....	40	5		.84		.81
Charlotte, N. C.....	40	2	1.11			1.06
Raleigh, N. C.....	40	5	.77			.68
Kittyhawk, N. C.....	41	3	1.07			1.07
Hatteras, N. C.....	46	5	1.32			1.29
Wilmington, N. C.....	46	7	.83			.80
Columbia, S. C.....	47	8	.83			.82
Charleston, S. C.....	50	6	.88			.88
Augusta, Ga.....	46	4	.86			.86
Savannah, Ga.....	50	4	.71			.71
Jacksonville, Fla.....	54	5	.70			.70
Jupiter, Fla.....	65	0	.76	.19		
Key West, Fla.....	69		.44			.44
Gulf States:						
Atlanta, Ga.....	41	4	1.17			1.17
Tampa, Fla.....	60	4	.56			.56
Pensacola, Fla.....	51	5	.97			.97
Mobile, Ala.....	50	4	1.11			.96
Montgomery, Ala.....	47	4	1.18			1.18
Meridian, Miss.....	48	7	1.25			1.22
Vicksburg, Miss.....	47	3	1.18			1.04
New Orleans, La.....	53	3	1.11			1.10
Shreveport, La.....	45	1	1.05			.95
Fort Smith, Ark.....	37	4	.60	.00		
Little Rock, Ark.....	42	1	.99			.87
Palestine, Tex.....	46	3	.92			.81
Galveston, Tex.....	53	0	.84			.84
San Antonio, Tex.....	51	3	.42			.42
Corpus Christi, Tex.....	58		.49			.49
Ohio Valley and Tennessee:						
Memphis, Tenn.....	40	2	1.18			1.18
Nashville, Tenn.....	38		.99			.98
Chattanooga, Tenn.....	40		1.81			1.81
Knoxville, Tenn.....	37	4	1.13			1.12
Lexington, Ky.....	35	3	.83			.83
Louisville, Ky.....	34	2	.84			.84
Indianapolis, Ind.....	29	0	.70			.70
Cincinnati, Ohio.....	33	1	.77			.77
Columbus, Ohio.....	29	1	.70			.70
Parkersburg, W. Va.....	34	4	.70			.70
Pittsburg, Pa.....	30	1	.70			.70
Lake Region:						
Oswego, N. Y.....	26	5	.70			.39
Rochester, N. Y.....	25	4	.70			.56
Buffalo, N. Y.....	26	3	.70			.40
Erie, Pa.....	28	3	.70			.69
Cleveland, Ohio.....	28	1	.56			.55
Sandusky, Ohio.....	27	1	.49			.49
Toledo, Ohio.....	27	2	.49			.49
Detroit, Mich.....	26	3	.48			.44
Lansing, Mich.....	24	2	.42			.41
Port Huron, Mich.....	23	0	.46			.43
Alpena, Mich.....	20	2	.56			.49
Sault Ste. Marie, Mich.....	16	0	.42	.01		
Marquette, Mich.....	18	2	.49			.10
Escanaba, Mich.....	16	4	.41			.23
Green Bay, Wis.....	18	3	.56			.48
Grand Haven, Mich.....	26	1	.63			.57
Milwaukee, Wis.....	21	3	.49			.49
Chicago, Ill.....	25	1	.49			.49
Duluth, Minn.....	12	8	.28			.22

a The figures in this column represent the average daily departure.

Table of temperature and rainfall, week ended January 6, 1902.—Cont'd.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Upper Mississippi Valley:						
St. Paul, Minn.....	11	112617
La Crosse, Wis.....	16	63232
Dubuque, Iowa.....	18	44141
Davenport, Iowa.....	21	54141
Des Moines, Iowa.....	18	103434
Keokuk, Iowa.....	24	44242
Springfield, Ill.....	27	24848
Cairo, Ill.....	35	27979
St. Louis, Mo.....	30	34747
Missouri Valley:						
Columbia, Mo.....	324242
Springfield, Mo.....	36	05555
Kansas City, Mo.....	25	92828
Topeka, Kans.....2121
Wichita, Kans.....	32	22109
Concordia, Kans.....	25	71414
Lincoln, Nebr.....	22	91515
Omaha, Nebr.....	19	112121
Sioux City, Iowa.....	17	92121
Yankton, S. Dak.....	1309
Valentine, Nebr.....	16	141212
Huron, S. Dak.....	7	171313
Pierre, S. Dak.....	14	151414
Moorhead, Minn.....	0	151414
Bismarck, N. Dak.....	4	141414
Williston, N. Dak.....	4	171414
Rocky Mountain and Plateau Region:						
Havre, Mont.....	9	281818
Helena, Mont.....	182723
Miles City, Mont.....	14	1407
Rapid City, S. Dak.....	20	130705
Spokane, Wash.....	25	146313
Walla Walla, Wash.....	31	145643
Baker City, Oreg.....	24	123535
Winnemucca, Nev.....	27	92828
Pocatello, Idaho.....	21	124745
Boise, Idaho.....	26	124947
Salt Lake City, Utah.....	28	43505
Lander, Wyo.....	20	101515
Cheyenne, Wyo.....	26	110707
North Platte, Nebr.....	19	1314	.02
Denver, Colo.....	27	131414
Pueblo, Colo.....	30	41414
Dodge City, Kans.....	25	101414
Oklahoma, Okla.....	38	34949
Amarillo, Tex.....	34	70505
Ablene, Tex.....	45	42828
Santa Fe, N. Mex.....	26	1314	.00	.14
El Paso, Tex.....	43	41313
Phoenix, Ariz.....	48	101212
Yuma, Ariz.....	55	91212
Pacific Coast:						
Seattle, Wash.....	40	7	1.15	.51
Tacoma, Wash.....	39	1.49
Portland, Oreg.....	39	7	1.6971
Roseburg, Oreg.....	40	6	1.50	1.22
Eureka, Cal.....	47	2.01
Red Bluff, Cal.....	44	4	1.15	1.15
Carson City, Nev.....	33	45849
Sacramento, Cal.....	45	29257
San Francisco, Cal.....	50	0	1.1399
Fresno, Cal.....	43	73527
San Luis Obispo, Cal.....	52	11	1.05	1.05
Los Angeles, Cal.....	53	147575
San Diego, Cal.....	5442

a The figures in this column represent the average daily departure.

Snow and ice bulletin for the week ended January 13, 1902.

[Received from Department of Agriculture, Weather Bureau—Depth of snow and thickness of ice at 8 p. m., January 13, 1902.]

Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.
	Inches.	Inches.		Inches.	Inches.
Arizona:	(a)		New York:		
Flagstaff.....			Albany.....	3	11.0
Connecticut:			Auburn.....	2	
Middletown.....	2		Bainbridge.....	2	
New Haven.....	(a)		Binghamton.....	4	
Storrs.....	2		Bolivar.....	14	
West Simsbury.....	1		Buffalo.....	6	9.0
Indiana:			Cooperstown.....	8	
Marion.....	1		Cortland.....	10	
Syracuse.....	4		Franklinville.....	8	
Iowa:			Geneva.....	6	
Davenport.....		11.0	Griffins Corners.....	3	
Dubuque.....	(a)	15.0	Ithaca.....	6	
Keokuk.....		9.5	Lake Placid.....	15	
Maine:			Malone.....	15	
Bangor.....	6		New York.....	(a)	
Buckfield.....	5		North Creek.....	14	
Eastport.....	4	9.0	Nunda.....	6	
Fairfield.....	9		Oswego.....	7	8.0
Gardiner.....	8	7.0	Penn Yan.....	3	
Lewiston.....	6	12.0	Plattsburg.....	8	
Portland.....	7		Port Henry.....	10	
Maryland:			Rochester.....	9	4.0
Bunnyside.....	10		Saranac Lake.....	15	
Massachusetts:			Saratoga.....	4	
Adams.....	4		North Dakota:		
Amherst.....	6		Bismarck.....	1	13.0
Boston.....	9		Pembino.....	1	
Concord.....	8		Williston.....	(a)	13.0
Fitchburg.....	8		Ohio:		
Mansfield.....	5		Bangorville.....	3	
Nantucket.....	2		Canal Dover.....	(a)	
North Adams.....	6		Cincinnati.....	(a)	0.0
Michigan:			Cleveland.....	2	6.0
Alpena.....	10	0.0	Coalton.....	3	
Big Rapids.....	(a)		Columbus.....	1	7.5
Detroit.....	(a)	14.0	Garrettsville.....	6	
Escanaba.....	2	12.0	Greenville.....	(a)	
Grand Haven.....	2	0.0	Philo.....	(a)	
Hillsdale.....	(a)		Portsmouth.....	(a)	
Houghton.....	12	12.5	Sandusky.....	1	9.5
Humboldt.....	10		Tiffin.....	1	
Lansing.....	3		Toledo.....	(a)	5.0
Mackinaw.....	7		Van Wert.....	(a)	
Mancelona.....	15		Pennsylvania:		
Manistee.....	4		Altoona.....	3	
Marquette.....	18	0.5	Brookville.....	4	
Port Huron.....	1	8.0	Confluence.....	6	
Saginaw.....	1		Erie.....	4	6.0
Sault Ste. Marie.....	9	12.0	Freeport.....	2	
Sidnaw.....	10		Greensburg.....	7	
South Haven.....	(a)		Harrisburg.....	(a)	
Thomaston.....	6		Johnstown.....	6	
Minnesota:			Parkers Landing.....	3	
Albert Lea.....	(a)		Philadelphia.....	(a)	1.0
Crookston.....	2		Pittsburg.....	1	0.0
Duluth.....	(a)	12.5	Reitz.....	10	
Mapleplain.....	(a)		Scranton.....	2	
Moorhead.....	5	19.0	Warren.....	5	
Owatonna.....	3		Rhode Island:		
St. Paul.....	(a)	17.0	Block Island.....	(a)	
Shakopee.....	(a)		Narragansett Pier.....	1	
Two Harbors.....	(a)		Providence.....	3	
Missouri:			South Dakota:		
Hannibal.....		6.0	Pierre.....		7.5
Nebraska:			Yankton.....		8.0
Omaha.....		8.0	Vermont:		
New Hampshire:			Brattleboro.....	15	11.0
Bethlehem.....	13		Newport.....	17	
Hanover.....	15		Northfield.....	17	
Keene.....	10		Virginia:		
New Jersey:			Bigstone Gap.....	(a)	
Atlantic City.....	(a)		Wytheville.....	(a)	
Cape May.....		2.5			
New Brunswick.....		0.5			

a Indicates trace.

Snow and ice bulletin for the week ended January 13, 1902—Continued.

Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.
West Virginia:	<i>Inches.</i>	<i>Inches.</i>	Wisconsin—Continued.	<i>Inches.</i>	<i>Inches.</i>
Elkins.....	3	La Crosse.....	(a)	14.
Fairmont.....	2	Medford.....	3
Parkersburg.....	(a)	0.0	Menasha.....	(a)
Wheeling.....	1	New London.....	(a)
Wisconsin:			Osceola.....	2
Ashland.....	(a)	12.0	Sheboygan.....	(a)
Green Bay.....	(a)	12.5	Washburn.....	4	12.0

a Indicates trace.

FOREIGN AND INSULAR.

AUSTRALIA.

Temporary measures against plague adopted in West Australia.

BERLIN, GERMANY, *December 21, 1901.*

SIR: I have the honor to transmit the following information obtained from the imperial health office at Berlin:

Regulations made by the central board of health.

1 (a) All rats in all wharves, stores, warehouses, and other buildings and premises under the control of the railway, customs, and harbor departments at the ports of western Australia shall be destroyed, and such methods shall be used for this purpose as shall be approved by an inspector authorized by the central board.

(b) Owners and occupiers of all houses, warehouses, granaries, stores, and other buildings and premises shall destroy or cause to be destroyed all rats therein.

2. The local board of health of each port and town of western Australia and of the city of Perth shall—

(a) Cause to be destroyed the rats in all drains, culverts, sewers, and other places under their control; and

(b) Take steps to compel owners and occupiers of all warehouses, granaries, stores, stables, and other buildings in their district to destroy all rats therein.

(c) In the event of such owners and occupiers refusing or neglecting to destroy the rats in accordance with the regulations in 1B Part I of these regulations, the local board of health shall undertake the destruction of the rats in such houses, warehouses, granaries, stores, stables, and other buildings and premises, and charge the owner or occupier with the cost thereof, and the owner or occupier thereof shall also be liable to the penalties under these regulations and the health act of 1898.

3. Complete precautions shall be taken to prevent rats coming ashore from ships in any port of western Australia, coming from or having touched at any port where bubonic plague is known or is suspected to exist, for which purpose the following shall be carried out:

(a) Every such vessel shall be kept off from the wharf or pier to a distance of at least 4 feet by means of fenders.

(b) Every such vessel shall be made fast to a wharf or pier by means of wire ropes. Every such wire rope shall be coated with tar over a length of at least 1 foot just beyond the side of the vessel and just above the end attached to the wharf or pier, the tar being kept in a sticky condition by repeated applications; and shall be provided with 2 metal funnels of approved pattern and dimensions, one being fixed above the tarred space at the shore end and the other below the similar space at the ship end of such wire rope.

(c) The fenders and fender slings shall be tarred, so as to prevent a migration of rats, and the tar shall be kept in a sticky condition by repeated applications.

(d) No net shall be used between the ship and the wharf or pier unless tarred and the tar kept in a sticky condition by repeated applications. All such nets shall be removed when the ship is not working.

(e) All gangways shall be drawn up when not required for discharging or receiving cargo from 7 p. m. to 6 a. m., and tar shall be applied to such gangways over a length of at least 1 foot at each end, just beyond the side of the vessel and just above the end resting on the wharf or pier, and the tar shall be kept in a sticky condition by repeated applications.

(f) There shall be suspended over the side along the wharf or pier 4 sets, or more if required, of electric or other suitable lights, so distributed as to furnish complete illumination fore and aft along the whole length of the side of the vessel.

(g) The owner, agent, or master of every such vessel shall supply 3 watchmen by night and 1 by day, and shall see that they constantly patrol the wharf or pier alongside the vessel from stem to stern and that they take all practicable measures to prevent the passage of rats between the ship and wharf or pier.

(h) All pipes, ports, and other holes in the side of the vessel next to the wharf or pier shall be completely closed, and kept closed so long as the vessel is alongside, in order to prevent ingress or egress of rats.

(i) No lighter shall be allowed alongside any such vessel unless special permission is given by an inspector or other authorized officer of the central board.

4. The bodies of all rats taken alive or dead shall be destroyed by fire.

5. The places at which rewards shall be offered for the destruction of rats captured shall be Perth, Fremantle, and Guildford, and intervening local board of health districts.

6. The owner, agent, or master of every vessel arriving at any port of western Australia, coming from or having touched at any port where bubonic plague is known or is suspected to exist, shall, before such vessel is allowed to proceed to her berth, sign an undertaking to comply with these regulations in the form prescribed by the central board for the purpose.

7. The local boards and their officers at all ports and towns of western Australia, and in the city of Perth, are hereby authorized and directed to superintend and see to the execution of this part of these regulations.

PART II.

8. The occupier of any house, premises, or place wherein there is any infectious or contagious disease shall immediately notify the presence of such disease to the secretary of the local board of the district, and if there be no local board, then to the secretary of the central board.

Any house, premises, or place wherein there has been a case of bubonic plague shall not be reoccupied until permission to reoccupy be granted by the central board after complete disinfection thereof has been carried out; and such house, premises, or place shall, for such period and until such permission be granted, remain in strict quarantine and be disinfected from time to time as the central board may direct.

9. The medical officers of and such inspectors as may be appointed by any local board or by the central board for the purpose of carrying out these regulations may at all times enter all houses, buildings, and premises for the purpose of carrying out the said regulations, or of inquiring into and ascertaining the presence therein of any infectious or contagious disease.

10. All infected bedding and clothing and all other infected things shall, if ordered by the central board, be destroyed, and if not so ordered to be destroyed shall be completely and thoroughly disinfected, and for this purpose every inspector of the central board or of any local board shall carry out such rules for such disinfection or destruction as may from time to time be made by the central board.

11. For the purpose of cleansing, purifying, ventilating, and disinfecting houses, schools, churches, places of assembly or entertainment, and other buildings and premises the owners or occupiers thereof shall comply with all orders made by the local board of the district or by the central board, and if such owners or occupiers shall neglect or refuse to carry out within the time limited such orders made for this purpose, then the medical or other officers of such local board or the central board may so cleanse, purify, ventilate, or disinfect such buildings, places, and premises, at the expense of the owners or occupiers thereof.

12. The owners and occupiers of all houses, warehouses, granaries, stores, stables, and other buildings and premises shall remove and abate any nuisance whatever therefrom.

13. In the event any nuisance whatever existing in any house, warehouse, granary, store, stable, and other building and premises, the officer of health of any local board of health, may notify the owners and occupiers to remove or abate such nuisance forthwith; if such nuisance is not removed forthwith by such owner and occupier, then such nuisance shall be removed by any officer of the local board or the central board of health, and charge the owner or occupier with the cost thereof, and the owners and occupiers thereof shall be also liable to penalties under these regulations and the health act, 1898, for allowing such nuisance to exist.

PART III.

20. The master of every ship arriving at any port in western Australia from any place or country where bubonic plague is known or suspected to exist, or having received cargo from such place or country, shall destroy the rats in such ship, and shall use such methods for this purpose as may be directed from time to time by the central board.

21. All cargo from all ships mentioned shall be disinfected or dealt with at such port in such manner as the medical officer may deem necessary.

Before removing cargo from such ships—

(a) Every package shall be separately examined and passed by an inspector of the central board before being slung.

(b) Every package not passed on such inspection shall be dealt with in such manner as the inspector (subject to the instructions of the central board) may direct.

(c) No package whatsoever shall be landed from such ship or vessel without the consent of the inspector, nor until so inspected and passed or otherwise dealt with.

The following articles are deemed by the central board liable to be infected, and shall not be landed at any port in western Australia from any place where bubonic plague is known or suspected to exist, or from any ship which shall have touched at or received cargo from such place—that is to say:

Green hides, untanned hides, fresh skins, and bones, whether whole, crushed, or in the form of bone dust, except bone dust chemically treated.

The local boards and their officer at all ports and towns of western Australia and in the city of Perth are hereby authorized and directed to superintend and see to the execution of this part of these regulations.

By order of the central board of health.

J. R. CAMPBELL, *Secretary.*

FRANK H. MASON,
United States Consul-General.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

BRAZIL.

Report from Bahia.

BAHIA, BRAZIL, *December 16, 1901.*

SIR: I beg leave to report that for the week ended December 14, 1901, there were 62 deaths in Bahia. The following were the chief causes of death: Arterio sclerosis, 1; beriberi, 3; bronchitis, 6; malarial fevers, 3; typho-malarial fever, 1; croup, 1; diarrhea, 1; dysentery, 3; gastro-enteritis, 8; senile debility, 1; nephritis, 3; still-born, 1; pneumonia, 1; syphilis, 2; tetanus, 3; tuberculosis, pulmonary, 4; syncope, cardiac, 2; other causes, 18.

Respectfully,

H. W. FURNISS,
United States Consul.

HON. SECRETARY OF TREASURY.

Reports from Rio de Janeiro.

RIO DE JANEIRO, BRAZIL, *December 4, 1901.*

SIR: I have the honor to transmit herewith the official sanitary report for the city of Rio de Janeiro for the week ended December 1. There were 326 deaths from all causes, a decrease of 25 as compared with the preceding week. There were 5 deaths from *accessio pernicioso*, an increase of 1; 4 from yellow fever, an increase of 2; 32 from small-pox, a decrease of 29; 5 from typhoid fever, an increase of 3; 2 from measles, a decrease of 1; 2 from whooping cough, a decrease of 2; 6 from plague, a decrease of 4; 1 from lymphangitis, pernicious, a decrease of 2, and 50 from tuberculosis, a decrease of 11.

No further alarm is entertained with reference to the plague. Quarantine has been officially declared by the Government against Glasgow, Genoa, Odessa, Alexandria, and Asuncion in Paraguay, because of the existence of plague in those ports, and all vessels proceeding from those ports or from neighboring ports in the respective countries must pass certain inspection at Ilha Grande. I inclose a circular received from Saint Lucia through the British consulate-general here. I have given

such vessels as did not lie alongside the wharves here a certificate to that effect. I inclose, also, a note just received from the legation here, which needs no comment.

Respectfully,

EDWARD W. AMES,
Sanitary Inspector.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

[Inclosures.]

Quarantine against Asuncion, Odessa, and other places on account of plague.

PETROPOLIS, BRAZIL, *November 30, 1901.*

SIR: I am just in receipt of a note from the minister for foreign affairs informing me that, in view of the appearance of bubonic pest in the cities of Asuncion, Odessa, and Alexandria, the minister of justice, in the name of the president of the republic, has declared those cities infected and the ports of Paraguay, of Russia (such as are on the Black Sea), and of the Mediterranean coast of Egypt suspected.

Will you kindly communicate this information where you may deem it necessary?

Respectfully,

THOMAS C. DAWSON,
Chargé d'Affaires.

Hon. EUGENE SEEGER,
United States Consul-General.

Saint Lucia quarantines against Rio de Janeiro.

[Regulations made by the governor-in-council under the provisions of the quarantine ordinance, 1895.]

SAINT LUCIA, *October 11, 1901.*

Vessels arriving from Rio de Janeiro after less than thirty days but not less than fourteen days may be permitted to coal alongside the wharf between the hours of 6 a. m. and 6 p. m., provided that the following conditions have been fulfilled: (1) That there has been no sickness or death on board during the voyage; (2) that a certificate is produced from a British or an American consular officer that the vessel has not been alongside any wharf or pier at Rio de Janeiro, and that there is no case of plague in the harbor; (3) that a certificate is given by the master of the vessel that the rats and other vermin on such vessel have been exterminated as far as possible before loading at Rio de Janeiro; (4) that the passengers and crew are inspected by the health officer and reported free from disease; (5) that no cargo is shipped or landed and that the cargo hatchways are not removed while the vessel is alongside the wharf; (6) that every precaution is taken to prevent rats coming ashore from the vessel.

The regulations passed on June 28, 1900, shall be read with this modification.

Passed by the governor-in-council, October 10, 1901.

SAMUEL OKELL,
Clerk of Councils.

RIO DE JANEIRO, BRAZIL, *December 13, 1901.*

SIR: I have the honor to transmit herewith the official sanitary report for the city of Rio de Janeiro for the week ended December 8. There were 311 deaths from all causes, a decrease of 15 from the preceding week. There were 4 deaths from *accessio pernicioso*, a decrease of 1; none from yellow fever, a decrease of 4; 51 from smallpox, an increase of 19; none from typhoid fever, a decrease of 5; none from measles, a decrease of 2; 2 from whooping cough, the same as before; 5 from plague, a decrease of 1; 1 from lymphangitis, pernicious, the same as before; 1 from beriberi, and 45 from tuberculosis, a decrease of 5.

Respectfully,

EDWARD W. AMES,
Sanitary Inspector.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

COSTA RICA.

Yellow fever in Port Limon during the quarantine season, 1901.

SIR: During the quarantine season of 1901—that is, from April 1 to November 1, there were 63 cases of yellow fever in Port Limon, Costa Rica, to my personal knowledge. Of these, 45 contracted the disease in Port Limon, and 18 came or were brought from stations on the railroad, distant 2 to 30 miles. These cases occurred by months as follows: April, 1 case; May, none; June, 2; July, 5; August, 26; September, 25; October, 4. About September 15 the heavy and continued rains set in and the mortality rate from all diseases was very much lessened. For instance, there were from all causes 39 deaths from August 15 to September 15, and only 19 from September 15 to October 15.

Of these 45 cases of yellow fever, originating in Port Limon, 20 were natives and 25 Americans and Europeans. The disease appeared in 22 houses or foci, a brief history or description of which follows:

Focus I.—A second-class hotel, block No. 43, on accompanying map of Port Limon, 1 one-story building, close to the ground, in a badly drained lot; thence we had case No. 1, April 1, 1901, Englishman; case No. 3, June 16, 1901, Englishman; case No. 30, August 28, 1901, American; case No. 59, October 28, 1901, American; case No. 60, October 3, 1901, American.

Focus II.—In the extreme western end of the town, $7\frac{1}{2}$ blocks, or about 750 yards, from Focus I, on a hill surrounded by shrubbery; rain water, caught in barrels and in a tank, is used for drinking; it is a one-story dwelling house, and here we had case No. 2, June 12, American; case No. 33, August 29, native, wife of an American.

Focus III.—One hundred and twenty-five yards north of Focus II, higher up the hill; dense foliage close to the house; rain water used and mosquitoes plentiful; communication between Foci II and III by no means easy, owing to undergrowth and the steep hillside; here we had case No. 4, July 4, American; case No. 5, July 18, American; case No. 9, August 1, American.

Focus IV.—Two hundred and sixty yards south of Focus I, a two-story house on the railroad in a low, badly drained spot, mosquitoes plentiful; here we had case No. 6, August 1, native; case No. 11, August 5, native; case No. 10, August 15, native; case No. 35, September 1, native.

Focus V.—In the middle of block 17, 60 yards west of the park, 120 yards NE. of Focus IV, and 250 yards south of Focus I, one of several rooms in a long row, partitions going up only partly to the top. Case No. 12, August 8, native. No attempt at disinfection was made at this house, it being impossible from its construction. The room was thrown open and strong winds and bright sunlight allowed to pass through.

Focus VI.—City jail, between seawall and park, 160 yards SE. of Focus V, 220 yards S. of E. of Focus IV. The first floor used for prisoners, the second is sleeping rooms for the policemen. Case No. 13, August 9, native; case No. 47, September 20, native.

Focus VII.—One hundred yards southeast of Focus I, and in the same block; offices on the ground floor, sleeping rooms above. Case No. 7, August 8, American; case No. 28, August 23, American.

Focus VIII.—The United Fruit Company's Hospital, to which most of the yellow-fever patients were carried and put into wards isolated and provided with screened doors and windows; only 1 case originated here, that of a white nurse; all other nurses were negroes. Case No. 51, August 7, Englishman.

Focus IX.—In block 35, 15 yards south of Focus III; a two-story house on the hill, surrounded by shrubbery; cistern water used; the house had been vacant for months until occupied by this patient a few days prior to her illness. Case No. 18, August 10, Englishman.

Focus X.—Southeast half of the Grand Hotel, a three-story building, one room deep, 300 feet long; attached to this southeast end is the hospital of the Costa Rica Railroad. All cases occurring in this building, whether from Foci X, XVIII, or XX, were in the second story, where mosquitoes were troublesome at times. On the third floor the very strong breezes kept the rooms free of them. Case No. 20, August 16, Englishman; case No. 22, August 17, Englishman; case No. 44, September 12, American; case No. 62, October 4, American.

Focus XI.—Custom-house; second floor used as residence; 80 yards east of Focus VI. Case No. 21, August 16, native; case No. 58, September 28, native.

Foci XII and XIII.—Thirty yards south of Focus I and about 60 yards west of Focus VII, all in the same block; Focus XII downstairs and to the rear, Focus XIII upstairs and to the front. Case No. 26, August 20, native; case No. 27, August 20, native.

Focus XIV.—Twenty-five yards north of Focus V. Case No. 29, August 24, native.

Focus XV.—Twenty yards south of Focus VIII. Case No. 37, September 3, native.

Focus XVI.—Forty yards northeast of Focus XIV. Case No. 31, August 31, native; case No. 34, September 2, native.

Focus XVII.—Sixty yards E. of Focus XVI, 120 yards NW. of Focus X. Case No. 38, September 9, native; case No. 39, September 9, native.

Focus XVIII.—Twenty yards SE. of Focus X. Case No. 7, August 1, native; case No. 40, September 6, Englishman.

Focus XIX.—One hundred and twenty yards N. of Focus IX. Case No. 42, September 9, American; case No. 43, September 11, American.

Focus XX.—Northwest half of Grand Hotel, this with Foci X and XVIII may properly be considered as one building. Case No. 53, September 27, American; case No. 61, October 4, American.

Focus XXI.—One hundred and twenty yards N. of Focus XIX and 100 yards W. of Foci I and XII. Case 54, September 24, native.

Focus XXII.—One hundred and twenty yards N. of Focus VIII. Case No. 57, September 30, German.

In drawing deductions from the above facts the following should be borne in mind:

Strong western and southwestern land breezes prevail at night, and eastern or sea breezes during the day—much personal intercommunication between the natives is probable, but between them and Americans it is at most very limited.

With few exceptions the patients were removed on the first or second day of illness to the isolated yellow-fever wards of the hospital, and disinfection of the vacated rooms done.

The population of Port Limon is about 4,000, made up of, say, 3,000 Jamaican negroes, who seemed to be immune, and 1,000 Americans, Europeans, and natives of Spanish ancestry. Many of the inhabitants who could give no cause for immunity escaped the disease.

Those physicians having the largest practice and the quarantine officials provisionally, at least, accepted the mosquitoes as a means of propagation of yellow fever and advised the general use of mosquito netting.

The acting assistant surgeon, U. S. Marine-Hospital Service, hav-

ing no authority over patients or attendants, all information and observations were by courtesy, and hence at times incomplete.

Respectfully,

D. W. GOODMAN,

*Late Acting Assistant Surgeon, U. S. M. H. S.,
Stationed at Port Limon, Costa Rica.*

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

CUBA.

Reports from Santiago, Manzanillo, Guantanamo, and Daiquiri.

SANTIAGO DE CUBA, *December 28, 1901.*

SIR: Through the chief quarantine officer for the island of Cuba, I have the honor to submit herewith the following report for the week ended December 21, 1901:

Santiago.—During this period there was a total of 20 deaths reported, making the annual rate of mortality for the week 24.18 per 1,000. The causes of death were as follows: Fever, intermittent malarial, 2; tubercle of lungs, 2; cancer of the uterus, 1; diabetes, 1; cerebral congestion and hemorrhage, 4; tetanus, 2; organic disease of the heart, 4; diarrhea and enteritis (under 2 years), 1; Bright's disease, 1; congenital debility, 1; ill-defined causes of death, 1. Total, 20. During the week 6 vessels were inspected and passed, 5 vessels were passed without inspection, and 9 vessels received bills of health prior to leaving port.

On December 15, 1901, the provisional flag steamship *Julia* was disinfectd prior to departure for Porto Rico. Two immune and 65 non-immune certificates were issued to passengers and 71 pieces of baggage disinfected by formaldehyd gas.

Manzanillo.—Acting Asst. Surg. Richard Wilson reports 10 deaths, making the annual mortality rate for the week 35.95 per 1,000. The causes of death were as follows: Tubercle of lungs, 2; tetanus, 1; pneumonia, 3; diarrhea and enteritis (2 years and over), 3; gangrene, 1. Total, 10.

During the week 4 vessels were inspected and passed on arrival, 3 vessels were passed without inspection, and 4 bills of health were issued to vessels prior to departure.

Guantanamo.—Acting Asst. Surg. Luis Espin reports 12 deaths, due to the following causes: Fever, intermittent malarial, 1; tubercle of lungs, 3; cancer of the womb, 1; meningitis, 1; tetanus, 2; pneumonia, 1; diarrhea and enteritis (2 years and over), 1; cirrhosis of liver, 1; Bright's disease, 1. Total, 12. Population, 18,000. Annual mortality rate for the week, 34.66 per 1,000.

During the week 4 vessels were passed without inspection and 2 bills of health issued to vessels leaving port.

Daiquiri.—Acting Asst. Surg. Juan J. de Jongh reports 1 death, due to drowning. During the week 3 vessels were inspected and passed on arrival and 2 vessels received bills of health prior to leaving port.

Respectfully,

R. H. VON EZDORF,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Inspection of immigrants at Santiago for the week ended December 21, 1901.

SANTIAGO DE CUBA, December 21, 1901.

SIR: I herewith submit report of alien steerage passengers at this port during the week ended December 21, 1901.

December 16, Spanish steamship *Puerto Rico*, from Barcelona and Spanish ports, with 120 immigrants. December 18, Spanish steamship *Conde Wifredo*, from Barcelona and Spanish ports, with 3 immigrants.

Respectfully,

R. H. VON EZDORF,

Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

ENGLAND.

Report from Liverpool.

LIVERPOOL, ENGLAND, December 28, 1901.

SIR: I have the honor to make the usual report for the week ended December 28, 1901. Nothing new in regard to the plague situation has arisen. No rat infection has been discovered, and in a few weeks, the conditions remaining as they are, we can safely assume that there will be no further outbreak of that disease from the old focus of infection.

There have been 2 cases of smallpox reported during the week, and 1 death. The 2 cases were removed from a vessel from Boston, Mass., and were sent to the hospital. The smallpox epidemic in London continues with increased severity. It is reported by the London Times to have broken out in Reigate, 20 miles from London, and it would not be surprising to hear of its presence in many places outside of the metropolis.

Respectfully,

CARROLL FOX,

Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

GERMANY.

Report from Berlin—Plague in various countries.

BERLIN, GERMANY, December 20, 1901.

SIR: I have the honor to transmit herewith the following information obtained from the imperial health office at Berlin:

Plague.

TURKEY.—On November 27 a fresh case of plague occurred in Constantinople.

BRITISH INDIA.—During the week ended November 15, there occurred in the Bombay Presidency 8,423 new plague cases and 6,506 deaths—that is to say, 810 less cases and 124 less deaths than during the foregoing week. In the city of Bombay, during the same period, there occurred 152 new cases and 182 deaths.

QUEENSLAND.—According to a telegraphic report dated December 11, a fresh case of plague has occurred at Brisbane.

CAPE COLONY.—On November 18, a new case of plague was registered at Port Elizabeth.

Respectfully,

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

FRANK H. MASON,
United States Consul-General.

Regulations for the administration of the municipal institutions for consumptives at Berlin.

BERLIN, GERMANY, *December 27, 1901.*

SIR: I have the honor to transmit the following synopsized translation of the regulations for the administration of the municipal institutions for consumptives at Berlin, which, in view of the satisfactory results attained in Germany in this connection will, I trust, be of interest:

[Translation.]

Extract from the regulations for the administration of the municipal institutions for consumptives.

RIGHT OF ENTRY.

Section 1. Such tuberculous patients are entitled to admission to the municipal institutions for consumptives with whom the progress of the disease has come to a certain standstill, and no fever is present, and with whom there is reasonable hope of restoration in order to enable the same to earn a living.

Persons afflicted with epilepsy, syphilis, and habitual drunkards are excluded.

PROCEDURE TO OBTAIN ADMISSION.

Sec. 2. Applications for admission to the institutions for consumptives can be made, in writing or verbally, to the office of the municipal institutions for convalescent patients, accompanied by a medical certificate made out on a special form obtainable free of charge at the office.

As a rule, the cost of the treatment in the institutions for the period mentioned in the medical certificate (see section 5) must be paid in advance at the collection department of the principal city cash office.

Persons bringing a binding declaration furnished by a public authority, guild, insurance or friendly society, or similar institution, according to which the cost of treatment is to be borne by the same, may be released from the advance payment and the collection will be subsequently made.

REPORTS CONCERNING THE PERSONS ADMITTED OR DISCHARGED FROM THE INSTITUTIONS.

Sec. 3. Each institution has to make a report every morning, by telephone, to the reception bureau, regarding the number of persons admitted on the previous day, and of those announced but not yet arrived, giving in each case the names and reception numbers, and, furthermore, the number of beds vacant in the course of the day.

The reception bureau reports, on its part, to the institutions in the same way, every morning, the number of applicants for admission for the same day and, when possible, for the day following.

RECEPTION IN THE INSTITUTION.

Sec. 4. Patients on being admitted into the institution are immediately introduced to the physician there.

Concerning the entries to be made, see section 6.

LENGTH OF STAY AND DISCHARGE.

Sec. 5. The term of sojourn in the institution is set in advance, and is generally fixed at two months. It can, however, be limited to a shorter time, if expressly desired by the patient or the person paying for the treatment.

RECEPTION BOOKS.

Sec. 6. For each institution a reception book is kept at the office. In this book, the arrivals at the institutions are entered in running numbers during the business year, and entries must be immediately made, carefully filling out every column. In the institution itself, the head nurse keeps a similar book.

REPORT JOURNAL.

Sec. 7. The head nurse must keep a report journal, in which the daily condition of the patients must be entered.

COLLECTION OF THE COST OF TREATMENT.

Sec. 8. Advance payments (see section 2, subsection 2) must be made at the chief city cash office.

If at the time of discharge of the patient, it should turn out that the money paid in advance has not been used up, in cost of treatment, the party who paid in the money is advised, and the balance is paid out to him.

ADMINISTRATION OF THE INSTITUTIONS.

Sec. 9. The management of each institution for consumptives is entrusted to a physician and a nurse of the Victoria House, and is administered according to these regulations.

NOURISHMENT OF THE PATIENTS.

Sec. 10. The patients receive, in the early morning, a mixture of milk and coffee, or cocoa, or milk, 1 or 2 rolls, and butter.

Breakfast, 1 or 2 slices of bread with butter and cold meat, or cheese; or bread and butter with smoked fish, eggs, minced raw meat, sour or sweet milk, etc.

At noon, soup with vegetables and meat, or roast meat with potatoes or dumplings.

In the afternoon, milk and coffee, or tea, 1 or 2 rolls or slices of bread with butter, and 1 or 2 boiled eggs.

In the evening, according to the season of the year, milk soup with meal, oatmeal, etc., 1 or 2 slices of bread and butter, or herring with potatoes and bread and butter; or sour milk and bread with butter; or tea and bread and butter; or bread and cold meat, 2 to 3 boiled eggs.

If the patients desire, they can be furnished with hot tea instead of coffee or cocoa. As much milk is to be given to them as they can stand. Beer, wine, etc., are only given to the patients when so ordered by the physician.

Respectfully,

FRANK H. MASON,
United States Consul-General.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Reports of cholera in the Dutch Indies.

BERLIN, GERMANY, December 27, 1901.

SIR: I have the honor to transmit herewith the following information regarding cholera, obtained at the imperial health office at Berlin:

DUTCH INDIES.—The following cases of cholera (deaths) have been registered in Java: In the town of Batavia, between October 23 and November 7, 63 (55); in Pamanoekan, between October 5 and October 11, 5 (4); in Pekalongan, between October 9 and October 29, 33 (22); in Pasoeroean, between October 22 and October 28, 19 (14); in Kraksaan, between October 21 and October 31, 6 (5); in the town and suburbs of Samarang, between October 26 and November 1, 105 fresh cases of cholera and 71 deaths were registered. Furthermore, the following cases of cholera (deaths) have been recorded: In Tapa Tocan, between October 4 and October 10, 8 (8), and in Samarinda (Borneo), between October 1 and October 11, 18 (15).

Respectfully,

FRANK H. MASON,
United States Consul-General.

The SURGEON-GENERAL, U. S. Marine-Hospital Service.

BERLIN, GERMANY, *December 26, 1901.*

SIR: I have the honor to transmit the following information obtained from the imperial health office at Berlin:

CHOLERA.

DUTCH INDIES.—In Java, according to bulletins published up to the end of October, the following cases of cholera (deaths) have occurred: In the town of Batavia, between October 1 and October 22, 134 (113); in Pamanoekan, between September 11 and September 27, 57 (48); in Cheriban, between September 30 and October 20, 7 (6); in Indramajoe, between September 21 and September 30, 44 (36); in Tegal, between September 25 and October 8, 30 (19); in Pekalongan, between September 11 and September 30, 45 (28); in Probolingso, between September 29 and October 12, 32 (27); in Pasoeroean, between October 1 and October 21, 32 (27), and in Kraksaan, between October 4 and October 20, 19 (12).

In the town and suburbs of Samarang, during the three weeks from October 5 to October 25, inclusive, the following cases of cholera and deaths were registered, viz, 168, 95, and 99, respectively (total, 362 cases), and 124, 61, and 78, respectively (total, 263 deaths).

Furthermore the following cases (deaths) were reported: In Palembang (Sumatra), between September 10 and October 11, 50 (31); in Segli, between September 11 and October 7, 6 (1); in Tapa Tocan, between September 27 and October 3, 10 (10); in Bandjermasin (Borneo), between September 17 and October 14, 313 (267), and in Samarinda, between September 17 and September 30, 29 (29).

Respectfully,

FRANK H. MASON,
United States Consul-General.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

HAWAIIAN ISLANDS.

Reports from Honolulu—Outgoing quarantine transactions for the week ended December 21, 1901.

HONOLULU, H. I., *December 28, 1901.*

SIR: I have the honor to make the following report of outgoing quarantine transactions at this station for the week ended December 21, 1901:

Steamers inspected and passed.....	1
Sailing vessels inspected and passed.....	4
Cabin passengers inspected and passed	1
Crew inspected and passed.....	63
Number of pieces baggage disinfected.....	44
Number of interisland steamers disinfected..	5
Number of sailing vessels disinfected.....	5

Respectfully,

L. E. COFER,
Passed Assistant Surgeon, U. S. M. H. S.,
Chief Quarantine Officer, Hawaii.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Confirming telegraphic report of deaths from plague at Honolulu.

HONOLULU, H. I., December 28, 1901.

SIR: Referring to my telegrams of December 24 and December 28, respectively, in which 3 new cases of plague are reported, 2 of them dying on December 24 and the third on December 28, I have the honor to give the following particulars which include all the information now obtainable concerning the cases:

On December 24, a Porto Rican, name unknown, was found dead on the porch of a house near the corner of Aala and King streets. The body was immediately removed to the morgue where the necropsy showed the cause of death to be plague.

In tracing the history of the case nothing was learned beyond the fact that the man had been temporarily engaged as a longshoreman in painting the hull of a vessel now in the harbor. The master of the vessel (ship *Archer*) when seen both by Dr. Pratt and this office in regard to the matter, said that he had employed a number of Porto Ricans to paint the hull of his vessel, but that they had not slept aboard. They had, however, taken their meals aboard while actually at work. As he had no record of their names, it could not be proved that this particular Porto Rican was one of the number. On the other hand the ship *Archer* had been lately fumigated by this office, and was immediately placed at a rat proof wharf where she has since remained, so the chances of infection from the vessel are so small as to hardly admit of consideration. As a number of Porto Ricans live at Aala and King streets, and as a dead rat found there about two weeks ago was found to be infected with plague, it is more reasonable to assume that this case was infected at this place, where he had gone evidently just prior to his death. The source of infection in this case, however, will never be definitely determined.

The second case (death, December 24), an Hawaiian man named William Makai, was found at his home at 32 Kawaiahao street. He had been employed at the California Feed Company, and undoubtedly received his infection there as did William Umi (death, December 12) and Doi Asakuchi (death, December 14). The third case, a Porto Rican (death, December 28), was found on School street, west of Nuuanu, and it is believed that he was one of a crowd of longshoremen engaged in painting the hull of the ship *Archer*, although this can not be conclusively proved. It is probable that he received his infection from Aala and King streets, as this is a locality where a number of Porto Ricans are living. While I do not think that the ship *Archer* is involved in this infection, I shall disinfect parts of her and perhaps the whole ship. In addition to the disinfection which she has already received, the crew's effects would have received the usual disinfection just prior to her departure.

Respectfully,

L. E. COFER,
Passed Assistant Surgeon, U. S. M. H. S.,
Chief Quarantine Officer, Hawaii.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Two deaths from plague in Honolulu.

[Cablegram.]

HONOLULU, H. I., December 28, 1901,
via San Francisco, Cal., January 6, 1902.

Referring to my cablegram of 24th, diagnosis confirmed in both suspicious cases. One died 24th, other to-day. Write to-day.

COFER.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

ITALY.

Report from Naples—Smallpox continues.

NAPLES, ITALY, December 23, 1901.

SIR: I have the honor to report that for the week ended December 21, 1901, the following ships were inspected at Naples:

December 15, the steamship *Commonwealth*, of the Dominion Line, bound with passengers and cargo for Boston. There were inspected and passed 294 steerage passengers and 55 pieces of large baggage; 421 pieces of baggage were disinfected by steam.

December 18, the steamship *Perugia*, of the Anchor Line, bound with passengers and cargo for New York. There were inspected and passed 257 steerage passengers and 89 pieces of large baggage; 341 pieces of baggage were disinfected by steam.

December 18, the Italian steamship *Dinnamare*, bound with cargo for New Orleans.

December 20, the steamship *Trave*, of the North German Lloyd Steamship Company, bound with passengers and cargo for New York. There were inspected and passed 269 steerage passengers and 62 pieces of large baggage; 394 pieces of baggage were disinfected by steam.

SMALLPOX AT NAPLES.

During the week ended December 21, 1901, there were officially reported at Naples 28 cases of smallpox and 1 death.

Respectfully,

J. M. EAGER,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Statistics regarding pellagra in Venice, Italy.

SIR: As inquiries have been made regarding the pellagra, a disease prevalent in this district, I deem that the following statistics taken from a report of the provincial bureau, in date, January 1, 1901, may be found of interest:

District of Venice.—Burano, 17.

District of Mestre.—Mestre, 30; Chitiguago, 29; Favaro, 8; Marcon, 40; Spinera, 20. Total, 127.

Portogruaro.—Portogruaro, 25; Cavole, 8; Fossolto, 200; S. Stino, 5; Teglio Veneto, 2. Total, 240.

District of Dolo.—Campolongo, 300; Campagua Lupia, 100; Campogara, 60; Fiesso, 29; Fosso, 24; Mira, 120; Stro, 37; Vigonavo, 10. Total, 680.

District of Mirano.—Mirano, 97; Noale, 7; Pianiga, 100; Salzano, 200; S. Maria di Sala, 12; Scorzé, 270. Total, 585.

District of Chioggia.—Cavarzere, 400; Cana, 7; Pellestrina, 17. Total, 424.

District of S. Danā.—S. Danā di Pione, 300; Cavazueckerina, 60; Ceggia, 6; Fonalto di Portogruaro, 25; Hevlo, 800; Musile, 11; Haventa di Pione, 51; Torre di Mosto, 6. Total, 1,259.

Comparing these figures with those of previous years—e. g., of the year 1898, a sensible decrease is to be noted :

	1898.	1901.
District of Chioggia.....	386	424
District of Dalo	691	680
District of Mestre.....	239	127
District of Mirano.....	527	680
District of Portogruaro.....	481	240
District of S. Danā	1,538	1,259
District of Venezia.....	40	17
Total.....	3,902	3,433

Respectfully,

HENRY N. JOHNSON,
United States Consul.

MALTA.

Malta quarantine regulations.

VALETTA, MALTA, *December 17, 1901.*

SIR: I have the honor to forward herewith inclosed copies of new Malta quarantine regulations just proclaimed through the medium of the Malta Government Gazette.

[Inclosure.]

MALTA QUARANTINE REGULATIONS.

By a proclamation made by the governor of Malta through the medium of the Malta Government Gazette, to-day, radical changes in the quarantine regulations are made. The following is a copy :

GOVERNMENT NOTICE.

His excellency, the governor, having heard the opinion of the council of health, has been pleased to repeal government notice No. 307 of December 11, 1901, and to direct that the following regulations be observed as regards vessels and passengers, viz :

INFECTED PLACES.

1. The following countries are, for purposes of quarantine, to be treated as infected : Arabia (except Perim and Aden); China; Egypt (except Port Said and Suez); India.
2. And the following ports : Ports in the Persian Gulf; ports in the Sea of Marmora and the Bosphorus; Smyrna; Batoum.

INFECTED VESSELS.

3. Infected vessels are vessels which have, or have had, on board, during the voyage or the preceding twenty days, cases of cholera, yellow fever, plague, or any disease with symptoms which, in the opinion of the chief government medical officer, resemble the symptoms of the said diseases.

VESSELS WHICH ARE NOT ALLOWED TO ENTER THE HARBOR BUT ARE ALLOWED TO COMMUNICATE WITH QUARANTINE ESTABLISHMENTS.

4. Infected vessels.
5. Vessels with pilgrims from the East, when not carrying a recognized medical officer.
6. Vessels from infected places, when not carrying a recognized medical officer.

VESSELS ALLOWED TO LOAD IN QUARANTINE.

7. Vessels arriving at Malta without a clean bill of health.
8. Infected vessels when carrying a recognized medical officer and not having on board an actual case of the diseases mentioned in paragraph 3 on board.
9. Vessels from infected places not having on board an actual case of the diseases mentioned in paragraph 3, when arriving within ten days of departure.
10. Vessels with pilgrims from the East when carrying a recognized medical officer.

VESSELS FROM INFECTED PLACES ADMITTED TO PRATIQUE.

11. Vessels without a clean bill of health, or from infected places, will be admitted to pratique after ten days from day of departure.

MEDICAL INSPECTION.

12. All vessels and passengers on arrival are subject to medical inspection.

PASSENGERS.

13. Passengers, before landing, must declare on oath before a marine police officer that they have not been in, or have not communicated with, an infected place within ten days. Otherwise they shall remain in quarantine to complete ten days from departure.

14. Passengers arriving on vessels without a clean bill of health shall complete ten days' quarantine from departure.

15. Passengers arriving from infected places more than ten days after departure are allowed to land in free pratique after strict medical inspection and thorough disinfection of their persons, effects, and luggage if the inspecting medical officer is satisfied that they are in good health.

16. Passengers not otherwise provided for are subject to the restrictions applicable to the vessels on which they arrive.

17. When twenty days have elapsed from the last case of plague, cholera, or other disease against which restrictions have been in force with regard to a country or place declared to be an infected place, a notice will be issued by the collector of customs to the effect that the place or port is no longer to be dealt with as infected.

N. B.—Vessels that carry a doctor and pass through the Suez Canal without taking on board either cargo or passengers will not be considered infected by contact with canal pilots taken on board from a disinfecting station, or by coaling and provisioning at Port Said under restrictions approved by the chief government medical officer.

By command :

G. STRICKLAND,
Chief Secretary to Government.

For the guidance of our army transports bound from Manila to New York by way of the Suez Canal and the Mediterranean and other government vessels intending calling at Malta, I would call particular attention to clauses *a* and *c* of paragraph 1. By comparing these new regulations with those previously issued it will be seen that it is now permissible to stop at Perim, Aden, Port Said, and Suez. This, however, does not permit passengers or others leaving those places and making excursions into the interior. Should such a thing happen, quarantine for the ship and all on board at Malta would be the result. Attention is also called to the N. B. paragraph following paragraph No. 17.

Respectfully,

JOHN H. GROUT,
United States Consul.

HON. ASSISTANT SECRETARY OF STATE.

NEW BRUNSWICK.

Inspection of immigrants at St. John for the week ended December 28, 1901.

ST. JOHN, NEW BRUNSWICK, *January 6, 1902.*

SIR: I have the honor to report that for the week ended December 28, 1901, there were inspected 51 immigrants; passed, 51; detained, none.

Respectfully,

VICTOR G. HEISER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Inspection of immigrants at St. John for the week ended January 4, 1902.

ST. JOHN, NEW BRUNSWICK, *January 6, 1902.*

SIR: I have the honor to report that for the week ended January 4, 1902, there were inspected 476 immigrants; passed, 476; detained, none.

Respectfully,

VICTOR G. HEISER,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

Inspection service at St. John.

ST. JOHN, NEW BRUNSWICK, *January 8, 1902.*

SIR: I have the honor to report that during the week ended January 4, 1902, I have inspected 2 steamers; 1 tugboat; number of seamen, 92; number of passengers, 30; vaccinated, 1.

Respectfully,

T. D. WALKER,
United States Medical Inspector.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

PORTO RICO.

Report from Ponce.

PONCE, P. R., *December 30, 1901.*

SIR: Through the chief quarantine officer for Porto Rico, I have the honor to transmit herewith the quarantine and abstract of bills of health reports for the week ended December 28, 1901.

During the week 2 vessels were inspected and passed and 1 was held in quarantine—the French steamship *Le Calvados*, from Sabanilla, Colon, Port Limon, Port au Prince, Petit Goaive, Jeremie, Gonoaives, and Cape Haitien. No passengers nor cargo for Ponce. Took cargo in quarantine and sailed the following day. Four bills of health were issued during the week. The sanitary condition of the city is about the same. A little more street cleaning is being done, but not sufficient. More attention is paid to the condemnation of bad foods than to the bad conditions existing in the streets and houses.

Respectfully,

W. W. KING,
Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

PRINCE EDWARD ISLAND.

Schooner Robin Hood released from quarantine at Charlottetown.

CHARLOTTETOWN, PRINCE EDWARD ISLAND, *December 28, 1901.*

SIR: Referring to my dispatch dated December 11, 1901, schooner *Robin Hood* in quarantine at Georgetown, Prince Edward Island, would say, I am informed the same has been released and is loading at that port.

The seaman has recovered, been released from the marine hospital, and joined his schooner at Georgetown. At the present time this province is free from smallpox.

Respectfully,

DELMER J. VAIL,
United States Consul.

Hon. ASSISTANT SECRETARY OF STATE.

RUSSIA.

Precautions against plague in making shipments from Odessa.

WASHINGTON, D. C., *January 7, 1902.*

SIR: Referring to this Department's letter of the 13th ultimo, as to the necessity for the disinfection of wool, goatskins, and old goloshes, shipped from Odessa to the United States, and your answer thereto of the 20th ultimo, I now have the honor to transmit herewith, for the information of the U. S. Marine-Hospital Service, copy of a dispatch on the subject from the consul of the United States at Odessa.

Respectfully,

JOHN HAY,
Secretary of State.

Hon. SECRETARY OF THE TREASURY.

[Inclosure.]

ODESSA, RUSSIA, *December 11, 1901.*

SIR: I have the honor to acknowledge the receipt of instruction No. 287 from the Department dated November 22, 1901.

I beg to assure the Department that very thorough precautions have been taken against contamination by rats both as regards merchandise and vessels.

No further cases of the plague have been reported.

Respectfully,

THOS. E. HEENAN,
United States Consul.

Hon. ASSISTANT SECRETARY OF STATE.

SCOTLAND.

Report from Glasgow—Smallpox in London—Plague in Mauritius.

GLASGOW, SCOTLAND, *December 30, 1901.*

SIR: I have the honor to make the following report: During the week ended December 28, the health of this city and of Scotland generally was satisfactory. In London, smallpox continues at about the same rate as before, the deaths for the week ended December 21 being 24 as against 21, 16, and 26 in the preceding three weeks. There are reported to be at the present time about 700 cases in hospital.

There is very little news as regards plague. In Mauritius, for the week ended December 19, there were 46 cases of plague with 21 deaths, and for the week ended December 26, there were 36 cases and 23 deaths.

In Egypt, for the week ended December 15, there was only 1 case of plague.

Respectfully,

A. R. THOMAS,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

TURKEY.

Regulations as to the admission of ships at Constantinople from plague-infected ports.

HULL, ENGLAND, *December 12, 1901.*

SIR: I beg to transmit you, hereunto annexed, a report on the action of the authorities at Constantinople, establishing regulations relating to the admission of ships to that port from ports infected with plague without having certificates to show that they were thoroughly cleared of rats before loading, and incidentally to dead rats and their connection with recent outbreaks of plague in Hull, Glasgow, and Liverpool. The circular of the British board of trade in relation to the above subject is also annexed and made a part of the report.

TURKEY AND RATS.

The Turkish authorities at Constantinople have taken the rat question seriously in hand by the adoption of regulations governing the admission of ships into that port from the Mediterranean, and ports where infection or plague is said to exist. The health board has considered the question in all its phases, and accepted the popular theory that rats are responsible for the spread of plague where the climate and unsanitary conditions are found to assist in its development.

As there is not another city on the European continent that needs protection against itself in this respect more than Constantinople, the promulgation of the new rules is regarded here with a seriousness that is not without a tinge of humor. In Hull the shipowners have already taken the matter in hand, and a correspondence has been opened with the Turkish embassy in London on the subject. The consular representative here knows nothing about it; nor do the people at the embassy, as is shown in replies to the consulate. The Wilson Steamship Company has been unable to obtain any authentic information on the subject from either source, and have to rest content with what has been published by the British board of trade. They are preparing, however, to meet the difficulty, and have secured the services of a professional rat killer in Hull to make war on the pests in all ships sailing for Constantinople. Heretofore it has been their custom to employ powerful disinfectants for this purpose, sulphur dioxide (SO_2) being largely used. Thousands of rats have been destroyed in this way, and in nearly every instance were found dead on the lower deck, immediately under the hatchway. They come out on the deck from the bilge to get the air and die there. It was found, however, that all did not perish this way, as numbers have been found dead under the deck.

The rat catcher's methods are said to be more effective. He operates at night when the ship is clear of its cargo, using traps principally, and various sorts of baits in which anise seed, pork, etc., figure prominently. In every case the carcasses are consumed in the furnaces. Some of these carcasses are sent to the medical officer of health, Dr. Mason, to undergo a bacteriological examination.

DEAD RATS AND PLAGUE.

It will be in order in this connection to invite the attention of the Department to an important fact having a special bearing on the recent so-called epidemics of plague in Hull, Glasgow, and Liverpool; it is this, that all this infection had its origin in, or was associated with, dead rats. This was specially noticeable in the mortality which occurred on the steamship *Friary* which came into Hull from Alexandria over a year ago, with 6 of its crew down with plague. There were 11 cases all told, 5 having died during the voyage. The remaining 6 died in the quarantine hospital 3 miles from Hull. All these men lived in the forecabin of the ship, where dead rats were found, and the presumption might be well set up that their deaths were the direct result of the effluvium from the putrefied remains. The unsanitary condition of this part of the ship assisted materially in causing this mortality. As I have already stated in my report on this subject, the cat and dog that lived in the same atmosphere with these men sickened and died. The men who were housed in the after part of the ship were not affected. The doctors who were called in were at first unable to diagnose these cases, and after some hesitation and considerable discussion agreed upon a diagnosis of pneumonic plague. The result of the post-mortem examinations showed that the chest cavities and lungs were the parts affected, and hence the word pneumonic. This seems to bear out to a certain extent the effluvium theory.

The *Friary* went direct to her dock without undergoing quarantine, and remained there a week or ten days, until she was ordered out by the medical authorities. During that period, hundreds of people had access to her, but not 1 case of infection occurred beyond those who were stricken in the forecabin. The outbreak, in a hotel at Glasgow, originated in the basement where dead rats were found, and was confined absolutely to the servants who were employed there. The case of the barmaid who was taken ill at the same time, is said to have been the result of fright more than anything else. Similar conditions were noticeable in the Liverpool outbreak, and the conclusion becomes inevitable that these short-lived epidemics are merely a malignant form of sickness which is brought about by a total disregard of the ordinary laws of sanitation. The practice in this country of poisoning rats, and permitting their carcasses to remain in the casings and under the floors in living houses, in a state of putrefaction, is not uncommon, and is very frequently responsible for sickness and disease which are liable to be misunderstood by medical practitioners. The dead rat and not the living rat seems to be the danger.

It will be seen by the following paper issued by the British board of trade, that the enforcement of the regulations at Constantinople will inflict great hardships on shipping, in addition to the cost involved in the tedious process of unloading and reloading, before finally discharging at the docks proper, as required by the provisions in Articles I and II.

THE CIRCULAR.

Regulations concerning the destruction of rats on ships bound for a Turkish port:

The board of trade has received, through the foreign office, a copy of a dispatch from His Majesty's ambassador at Constantinople, dated the 5th instant, transmitting copies of the new regulations dealing with the destruction of rats on board ships bound for Constantinople.

His Majesty's ambassador reports that the regulations as finally adopted by the Constantinople sanitary board are of a much milder character than those at first proposed, the British delegate on the board having succeeded in securing a reasonable delay in the enforcement of the new measure which is only to come into operation in the case of arrival from the Black Sea and Mediterranean in a month, and in the case of ships arriving from elsewhere in two months, after the regulations have been printed and formally accepted by the Porte.

Articles I and II of the new regulations enact that vessels coming from a port infected with plague must be provided with a certificate of "rat destruction" obtained at that port, or at some intermediate port, without which they will have to proceed to the lazaretto for quarantine.

The only advantage which a certificate of rat destruction will give to a ship from a contaminated port is that it will be allowed to operate in the port, although not alongside the quays. A ship from a contaminated port, on the other hand, which has no such certificate, will be compelled to go to lazaretto (such as Touzla or Kavak) and have its rats destroyed.

As this process of rat destruction can only be carried out when a ship is completely empty, a ship arriving from a contaminated port without a certificate of rat destruction, will, under Article I, be compelled to go to a lazaretto to completely discharge its cargo into lighters, to have its rats destroyed, and to reload before it can come to Constantinople, and discharge a second time. This would involve an enormous loss of time and money (two to four days of time, and 2 francs per ton of money at least), and it will be essential that all ships coming to Constantinople from a contaminated port must provide themselves with a certificate of rat destruction; otherwise on arrival at Constantinople they will be subjected to the above costly measures.

The regulations (in French) may be seen on application at the commercial intelligence branch of the board of trade, 50 Parliament street, S.W., any day between the hours of 10 a. m. and 5 p. m.

Respectfully,

WM. P. SMYTH,
United States Consul.

HON. ASSISTANT SECRETARY OF STATE.

Foreign and insular statistical reports of countries and cities—Yearly and monthly..

ARGENTINA—*Buenos Ayres*.—Month of October, 1901. Estimated population, 800,000. Total number of deaths, 1,371, including diphtheria, 18; enteric fever, 7; measles, 9; scarlet fever, 30; whooping cough, 2; smallpox, 61, and 176 from tuberculosis.

CANADA—*Manitoba—Winnipeg*.—Month of December, 1901. Estimated population, 25,642. Total number of deaths not reported. One death from diphtheria and 2 deaths from measles reported.

Quebec—Sherbrooke.—Month of December, 1901. Estimated population, 11,765. Total number of deaths, 30, including diphtheria, 1, and 8 from scarlet fever.

CHILE—*Iquique*.—Four weeks ended December 14, 1901. Estimated population, 27,000. Total number of deaths, 123. No deaths from contagious diseases reported.

CUBA—*Santiago*.—Month of November, 1901. Estimated population,

43,000. Total number of deaths, 91, including diphtheria, 1; enteric fever, 1, and 19 from tuberculosis.

FRANCE—*Marseille*.—Month of November, 1901. Estimated population, 491,161. Total number of deaths, 779, including diphtheria, 5; enteric fever, 22; measles, 10, and 2 from whooping cough.

FRANCE—*Rouen*.—Month of November, 1901. Estimated population, 112,657. Total number of deaths, 241, including diphtheria, 1; enteric fever, 6; measles, 4, and 63 from tuberculosis.

FRANCE—*St. Etienne*.—Two weeks ended December 15, 1901. Estimated population, 146,559. Total number of deaths, 103, including diphtheria, 3; enteric fever, 1; measles, 1, and 14 from tuberculosis.

GERMANY—*Hanover*.—Month of October, 1901. Estimated population, 240,021. Total number of deaths, 272, including 29 from infectious diseases.

GREAT BRITAIN—*England and Wales*.—The deaths registered in 33 great towns in England and Wales during the week ended December 21, 1901, correspond to an annual rate of 19.3 per 1,000 of the aggregate population, which is estimated at 11,463,026. The highest rate was recorded in Oldham, viz, 32.6, and the lowest in Portsmouth, viz, 14.3.

Bradford.—Two weeks ended December 14, 1901. Estimated population, 280,161. Total number of deaths, 159, including enteric fever, 4; measles, 1; scarlet fever, 1; whooping cough, 1, and 13 from tuberculosis.

London.—One thousand six hundred and twenty-six deaths were registered during the week, including measles, 65; scarlet fever, 15; diphtheria, 34; whooping cough, 20; enteric fever, 8; smallpox, 24, and diarrhea and dysentery, 14. The deaths from all causes correspond to an annual rate of 18.7 per 1,000. In Greater London 2,194 deaths were registered, corresponding to an annual rate of 17.3 per 1,000 of the population. In the "outer ring" the deaths included 18 from diphtheria, 9 from measles, 4 from scarlet fever, 8 from smallpox, and 4 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended December 21, 1901, in the 21 principal town districts of Ireland was 22.3 per 1,000 of the population, which is estimated at 1,079,708. The lowest rate was recorded in Queenstown, viz, 0.0, and the highest in Tralee, viz, 37.2 per 1,000. In Dublin and suburbs 196 deaths were registered, including diphtheria, 3; enteric fever, 4; scarlet fever, 2; whooping cough, 4, and 34 from tuberculosis.

Scotland.—The deaths registered in 8 principal towns during the week ended December 21, 1901, correspond to an annual rate of 21.5 per 1,000 of the population, which is estimated at 1,656,525. The lowest mortality was recorded in Leith, viz, 13.4, and the highest in Perth, viz, 31.5 per 1,000. The aggregate number of deaths registered from all causes was 684, including diphtheria, 3; measles, 30; scarlet fever, 2, and 10 from whooping cough.

JAPAN—*Nagasaki*.—Ten days ended December 10, 1901. Estimated

population, 131,700. Total number of deaths not reported. One death from enteric fever reported.

SOUTH EAST AFRICA—*Laurenço Marquez*.—Month of October, 1901. Estimated population, 7,000. Total number of deaths, 31, including 3 from tuberculosis.

SWITZERLAND.—Reports for the two weeks ended December 7, 1901, from 18 cities and towns having an aggregate estimated population of 740,000, show a total of 514 deaths, including diphtheria, 22; enteric fever, 1; measles, 1; whooping cough, 6, and 60 from phthisis pulmonalis.

Cholera, yellow fever, plague, and smallpox, December 27, 1901, to January 17, 1902.

[Reports received by the Surgeon-General United States Marine-Hospital Service from United States consuls through the Department of State and other sources.]

[For reports received from June 29, 1901, to December 27, 1901, see PUBLIC HEALTH REPORTS for December 27, 1901.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Nov. 28-Dec. 17...		7	
Calcutta	Nov. 24-Dec. 14...		115	
Madras	Nov. 16-Dec. 6...		64	
Java:				
Batavia	Nov. 17-Nov. 30...	35	23	
Straits settlements:				
Singapore	Oct. 1-Nov. 16...		29	

YELLOW FEVER.

Brazil:				
Bahia	Dec. 1-Dec. 7...	1	1	
Rio de Janeiro	Nov. 11-Dec. 8...		7	
British West Indies:				
Barbados	Dec. 13			Prevalent.
Mexico:				
Vera Cruz	Dec. 15-Jan. 4...	18	13	

PLAGUE.

Brazil:				
Rio de Janeiro	Nov. 11-Dec. 8...		40	
France:				
Marseille	Dec. 1	1		On ss. Pehio, from Batoum.
Hawaiian Islands:				
Honolulu	Dec. 11-Jan. 6...		8	
India:				
Bombay Presidency and Sind:				
Northern Division—				
Ahmedabad City	Nov. 17-Dec. 7...		2	
Bombay City	do	826	520	
Broach District	do	386	258	
Kaira District	do	127	88	
Surat District and Town	do	423	309	
Thana District	do	126	104	
Central Division—				
Ahmednagar District	do	16	11	
Khandesh District	do	551	413	
Nasik District	do	253	183	
Poonah District and City	do	1,209	1,038	
Satara District	do	5,565	4,054	
Sholapur District and Town	do	22	16	
Southern Division—				
Belgaum District	do	5,090	3,978	
Dharwar District	do	4,459	3,337	
Hubli Town	do	13	12	
Kanara District	do	81	42	
Kolaba District	do	75	69	
Ratnagiri District	do		2	
Sind—				
Karachi City and District	do	183	156	
Political Charges—				
Aundh State	do	172	128	
Baroda State	do	230	174	
Cutch State	do	143	119	
Kathiawar State	do	35	22	
Kolhapur and Southern				
Mahratta Country	do	4,337	3,125	
Sachin State	do	10	10	
Savanur State	do	163	116	
Outside Bombay Presidency and Sind:				
Madras Presidency	do	453	337	
Bengal—				
Hurdwan Division	do			
Calcutta	do	77	76	
Chota Nagpur Division	do	131	105	

Cholera, yellow fever, etc.—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<i>India—Continued.</i>				
<i>Outside Bombay Presidency and Sind—Continued.</i>				
<i>Bengal—Continued.</i>				
Orissa.....	Nov. 17-Dec. 7...			
Patna.....do.....	556	407	
<i>Northwest Province and Oudh:</i>				
Allahabad Division.....do.....	119	83	
Benares Division.....do.....	181	173	
<i>Punjab:</i>				
Delhi Division.....do.....	642	500	
Jullunder Division.....do.....	2,586	1,408	
Lahore Division.....do.....	2,135	917	
Rawalpindi Division.....do.....	2,103	1,228	
<i>Mysore State:</i>				
Bangalore City, District, and Military Station.....do.....	747	569	
Chitaldrug District.....do.....	120	94	
Kadur District.....do.....	16	15	
Kolar District and Gold Fields.....do.....	12	11	
Mysore City and District.....do.....	776	595	
Shimoga District.....do.....	36	22	
Tumkur District.....do.....	9	9	
<i>Kashmir:</i>				
Jammu Province.....do.....	1,153	504	
Mauritius.....	Nov. 29-Dec. 26...	137	81	

SMALLPOX.

Argentina:				
Buenos Ayres.....	Oct. 1-Oct. 31...		61	
Austria-Hungary:				
Prague.....	Dec. 1-Dec. 21...	28		
Belgium:				
Antwerp	Dec. 10-Dec. 21...	5		
Ghent.....	Dec. 8-Dec. 28...		12	
Brazil:				
Rio de Janeiro	Nov. 11-Dec. 8...		202	
Pernambuco.....	Nov. 1-Nov. 30...		130	
Canada:				
Quebec.....	Dec. 15-Jan. 4...	77		
Colombia:				
Cartagena.....	Nov. 25-Dec. 22...		10	
Panama.....	Dec. 17-Dec. 23...	15		
Ecuador:				
Guayaquil.....	Sept. 28-Dec. 7...		30	
England:				
Liverpool.....	Dec. 15-Dec. 21...	2		One from ship from Boston
London.....	Dec. 8-Dec. 21...	1,038	61	
France:				
Lyons.....	Dec. 1-Dec. 7...		1	
Nice.....	Nov. 1-Nov. 30...		1	
Paris.....	Dec. 8-Dec. 21...		14	
India:				
Calcutta.....	Dec. 1-Dec. 7...		2	
Karachi.....	Nov. 25-Dec. 15...	13	4	
Madras.....	Nov. 16-Dec. 6...		5	
Italy:				
Naples.....	Dec. 1-Dec. 21...	83	6	
Malta:				
Valletta.....do.....	2		
Manitoba:				
Winnipeg.....	Dec. 8-Dec. 31...	13		
Mexico:				
City of Mexico	Dec. 9-Dec. 15...	86	34	
New Brunswick:				
St. John.....	Oct. 20-Dec. 28...	107	22	
Nova Scotia:				
Halifax	Dec. 15-Jan. 4...	38	1	
Windsor.....do.....	1		
Russia:				
Moscow.....	Nov. 24-Dec. 14...	19	8	
Odessa	Dec. 1-Dec. 21...	19	3	
St. Petersburg.....do.....	16	7	
Warsaw.....	Nov. 24-Nov. 30...		2	

Cholera, yellow fever, etc.—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain:				
Corunna	Dec. 1-Dec. 28...		4	
Malaga.....	Nov. 1-Nov. 30...		23	
Straits Settlements:				
Singapore	Oct. 1-Nov. 16...		2	
Uruguay:				
Montevideo.....	Oct. 26-Nov. 9...	108	5	

Weekly mortality table, foreign and insular cities.

Cities	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Acapuleo.....	Dec. 28	6,000	7											
Alexandretta.....	Dec. 14	9,000	7											
Amherstburg.....	Jan. 4	2,250	1											
Amsterdam.....	Dec. 21	530,104	135	13								6		
Antwerp.....	Dec. 14	299,346	2					1				1		
Do.....	Dec. 21	299,316	90											
Athens.....	Dec. 14	200,000		6						2		1		2
Bahia.....	Dec. 7	200,000	84				1							
Do.....	Dec. 14	200,000	62											
Barmen.....	Dec. 7	142,000	57	6							2		1	
Do.....	Dec. 14	142,000	49	5						1	3			
Barranquilla.....	Dec. 22	40,000	32											
Batavia.....	Nov. 16	150,000				20								
Do.....	Nov. 30	150,000				8								
Beirut.....	Dec. 14	80,000	14											
Belize.....	Jan. 2	9,000	4											
Bergen.....	Dec. 20	71,000	18											
Berlin.....	Dec. 7	1,902,997	558											
Birmingham.....	Dec. 21	523,284	214							3	10	15	5	
Bombay.....	Dec. 3	770,843	818	95	187	3				1	4	1	7	6
Do.....	Dec. 10	770,843	805	93	151	2				2				
Bordeaux.....	Dec. 22	257,471	122							2				
Bremen.....	Dec. 7	160,823	48	6						1	7	2		
Do.....	Dec. 14	160,823	36	6						6	1	1		
Brussels.....	do.....	582,665	189								2	3		1
Budapest.....	Dec. 9	729,383									6	1	1	1
Calcutta.....	Nov. 30	843,487	545		21	31								
Do.....	Dec. 7	843,487	539		30	48		2						
Cartagena.....	Dec. 22	8,000	19	1				3						
Catania.....	Dec. 19	151,180	67	6						3				
Christiania.....	Dec. 14	229,000	68									1	1	1
Coburg.....	Dec. 7	21,519	6	3										
Cologne.....	Dec. 14	579,059	125	15								2		
Copenhagen.....	do.....	476,876	110	10						2	2			2
Corunna.....	Dec. 21	40,500	33	5				2					1	
Crefeld.....	Dec. 14	106,887	29											
Cragno.....	Dec. 21	30,828	9											
Dresden.....	Dec. 7	409,060	121	12										
Dundee.....	Dec. 21	161,346	86									2	7	1
Dusseldorf.....	Dec. 14	230,786	74									2		
Edinburgh.....	do.....	317,885	125							1	2	1	1	1
Flushing.....	Dec. 21	317,885	116											1
Frankfurt.....	Dec. 11	18,991	10											
Funchal.....	Dec. 14	293,000	89											1
Do.....	Dec. 15	41,019	14	3										
Do.....	Dec. 22	41,019	14	4						1				
Geneva.....	Dec. 7	101,044	32									1		
Ghent.....	Dec. 21	160,949	87	5								1		
Gibraltar.....	Dec. 15	27,460	8					4						1
Do.....	Dec. 22	27,460	7											
Girgenti.....	Dec. 14	25,069	13											
Glasgow.....	Dec. 27	760,424	329											
Karachi.....	Nov. 24	108,808	137		54					6	2	1	22	7
Do.....	Dec. 1	108,808	125		51									
Do.....	Dec. 8	108,808	121		50			2						
Kingston, Canada.....	Jan. 3	18,300	9											
Halifax.....	Jan. 4	40,787	3											
Havre.....	Dec. 11	130,196	57	18								1		
Lausanne.....	Dec. 7	46,407	11							1				
Leeds.....	Dec. 21	430,489	144	13										
Do.....	Dec. 28	430,489	181	17										
Leith.....	Dec. 14	77,670	24	4						1		2	3	18
Do.....	Dec. 21	77,670	20	4										
Lienta.....	Dec. 14	23,500	10											
Liege.....	do.....	173,289	44							4				
Liverpool.....	do.....	686,332	279							1				
Do.....	Dec. 21	686,332	297							6	6	6	1	13
Livingston.....	Dec. 30	300	1							2	3	8		
London.....	Dec. 21	6,044,287	2,194					32		16	19	52	74	24
Lyons.....	Dec. 14	473,147	167							1	1	2		
Madras.....	Nov. 29	509,346	570		22								5	
Do.....	Dec. 6	509,346	581		15		3						2	
Magdeburg.....	Nov. 23	227,960	77	8							1	2		1
Manchester.....	Dec. 21	546,494	225	19								3	16	7
Mannheim.....	Dec. 14	144,666	39								1			

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Mazatlan.....	Dec. 22	20,000	32
Messina.....	Dec. 21	107,000	25	3
Monrovia.....	Nov. 23	10,000	4
Do.....	Nov. 30	10,000	4
Montevideo.....	Nov. 2	215,061	79	4	2	1
Do.....	Nov. 9	215,061	70	1
Newcastle-on-Tyne.....	Nov. 14	236,000	79	2	1	1	1
Do.....	Nov. 21	236,000	74	2	2
Nottingham.....	Dec. 7	239,753	93	1	2	1
Do.....	Dec. 14	239,753	83	2
Nuremberg.....	Dec. 7	262,000	91	15	7
Odessa.....	Dec. 14	412,000	210	31	1	6	17	5	3	2
Palermo.....	Dec. 21	339,000	116	3	1
Plymouth.....	Dec. 21	2,511,629	998	6	3	2	17	8	3
Prague.....	Dec. 14	106,000	37	1
Puerto Cortez.....	Jan. 2	205,815	121	21	1	3	1	4
Quebec.....	Jan. 4	2,000	0
Rio de Janeiro.....	Dec. 1	68,000
Do.....	Dec. 8	793,000	325	50	6	4	32	5
Rome.....	Nov. 16	793,000	311	45	5	51	1	2	2
Do.....	Nov. 23	419,589	170	19
Rotterdam.....	Dec. 21	419,589	149	17	2
St. Petersburg.....	Dec. 14	339,825	139
St. Stephen, New Brunswick.....	Dec. 14	1,248,643	647	108	1	23	20	23	14	6
Santa Cruz, Teneriffe.....	Jan. 4	2,840	0
Do.....	Dec. 14	36,500	13	1
Santander.....	Dec. 21	36,500	16
Sheffield.....	Dec. 23	53,574	34
Do.....	Dec. 14	400,000	167	18	5	10	1
South Shields.....	Dec. 21	400,000	147	8	1	2	6	1
Do.....	Dec. 14	101,402	41	3	1	1	1
Stettin.....	Dec. 21	101,402	39
Stuttgart.....	Dec. 15	210,680	72	3
Stockholm.....	Dec. 7	301,050	95	16	1
Stutgart.....	Dec. 5	276,313	48
Sunderland.....	Dec. 21	147,205	52	2	2	3
Trapani.....	Dec. 14	61,437	22
Tuxpam.....	Dec. 30	13,000	8
Utile.....	Dec. 14	800	0
Do.....	Dec. 21	800	0
Vera Cruz.....	Dec. 28	32,000	34	7	2
Vienna.....	Dec. 14	1,709,211	557	101	7	9	7	2
Windsor, Nova Scotia.....	Jan. 4	3,000	0
Yokohama.....	Dec. 7	189,455	1
Zurich.....do.....	161,732	39

By authority of the Secretary of the Treasury :

WALTER WYMAN,
Surgeon-General U. S. Marine-Hospital Service.